NOTICE

TO AWARDING **FUTURE** PREPARATORY ANY DEVELOPMENT OF MAINTENANCE CONTRACTS FOR THIS SYSTEM, USER AGENCIES AND SUPPORTING PROCUREMENT ACTIVITIES MUST ASSURE SELECTED CONTRACTOR FIRMS AGREE TO AND DECLARE, IN WRITING, CONTRACT PERFORMANCE WILL LIMITED TO U.S. CITIZEN PERSONNEL ONLY. THIS IS A MANDATORY REQUIREMENT DUE TO THE MILITARY CRITICAL **TECHNOLOGIES** AND **TECHNICAL** INFORMATION WITH UNIQUE MILITARY UTILITY ASSOCIATED WITH AFFECTED **SOFTWARE AND** SUPPORTING DOCUMENTS.

DESTRUCTION NOTICE

DESTROY BY ANY METHOD THAT WILL PREVENT DISCLOSURE OF CONTENTS OR RECONSTRUCTION OF DOCUMENT.

SUMMARY of CHANGE

AISM 25-P15-A01-AIX-DBDD Military Personnel Out-Processing (OUTPROC) Database Design Description (DBDD) Manual 20 September 1998

This updated manual--

- Replaces all previous versions of Database Design Description (DBDD) manual prepared in accordance with (IAW) Department of Defense (DOD) documentation standards MIL-STD-498, which was canceled on 27 May 1998.
- Adheres to the documentation standards contained in the Institute of Electrical and Electronics Engineers (IEEE)/Electronics Industries Association (EIA) standard, IEEE/EIA 12207, "Information Technology-Software Life Cycle Process".
- Provides an updated menu hierarchy diagram, entity relationship diagram, database schema and attributes, data dictionary, cross reference tables, and a list of INPROC database error messages.
- Provides a blank copy of DA Form 2028 (Recommended Changes to Publications and Blank Forms). This form is at the end of the manual and users may reproduce and use it to write corrections, additions, or comments about the manual. Users may, also use it as cover sheet to a marked up copy of the OUTPROC DBDD.
- Be advised that changes would be subject to the approval by the appropriate Subject Area Functional Proponent (SAFP).

TABLE OF CONTENTS

1	SCC	PE		1-1
	1.1	1 IDENTIFICATION 1		
	1.2	1-1		
		1.2.1 Organiz	zational and Personnel References	1-1
	1.3		VERVIEW	
		1.3.1 Securit	у	1-2
		1.3.2 Securit	y Guidelines for Using OUTPROC	1-2
		1.3.2.1	•	
		1.3.2.2		
		1.3.2.3		
		1.3.2.4	Service Interruption/Degradation.	1-3
		1.3.2.5	Human Errors of Commission and Omission	1-3
		1.3.2.6	Privacy Violations	1-3
		1.3.2.7	•	
		1.3.2.8		
2	DEE	EDENCED DO		
2			CUMENTS	
3	DAT		E DESIGN DECISIONS	
	3.1		ONS.	
	3.2		ENTIFICATION.	
			ns Using the Database.	
			onship to Other Databases.	
	3.3			
			IS Configuration.	
			are Configuration.	
			se Software Utilities.	
			y	
	3.4		UTPUTS.	
			S	
		_	nse to Inputs and Queries.	
			ces.	
			LE APPEARANCE	
			NVENTIONS.	
	3.7		N OF THE DATABASE	
			al Allocation.	
	3.8		ANAGEMENT USED	
			ity	
	3.9			
	3.10 DATABASE DISTRIBUTION, UPDATES AND MAINTENANCE.			
			ution	
			nance	
		•	y	
			RESTORATION.	
	3.12		UIREMENTS.	
		3.12.1 Physica	al Mapping of Database Tables	3-6
4	DET	AILED DESIG	N OF THE DATABASE	4-6

	4.1	DESIGN METHODOLOGY	4-6	
		4.1.1 Content.		
		4.1.2 Description.		
		4.1.3 Physical Structure.		
		4.1.4 Sizing.		
		4.1.5 Recovery.		
	4.2	4.1.6 Requirements Cross-Reference.		
	4.2	TABLE INFORMATION		
		4.2.1 Rationale		
		4.2.3 Description.4.2.4 Storage Control Parameters.		
		4.2.5 Recovery		
	4 3	DATABASE DESIGN LEVEL		
	4.4	SUPPORT SOFTWARE AVAILABLE FOR HANDLING THE DATABASE		
_				
5		TWARE UNITS USED FOR DATABASE ACCESS OR MANIPULATION		
	5.1 5.2	DATABASE ACCESS AND MANIPULATION. CURRENT ARMY INSTALLATION SOFTWARE ENVIRONMENT.		
	3.2	5.2.1 Software Units		
	5.3	SOFTWARE ENVIRONMENT		
	5.5	5.3.1 Hardware Required.		
		5.3.2 Software Required		
		5.3.3 Database/Data Bank Characteristics.	5-2	
	5.4	DATA INTERFACES		
		ERROR HANDLING.		
		MESSAGES.		
6	REQ	OUIREMENTS TRACEABILITY.	6-1	
7	NOTES			
/	7.1	SPECIAL INSTRUCTIONS		
		DATABASE SOFTWARE UTILITIES		
8	TER	MS AND ABBREVIATIONS	8-2	
9	OUT	PROC ERROR MESSAGES	9-1	
10	OUT	PROC HIERARCHY DIAGRAM	10-1	
		PROC DATABASE SCHEMA AND ATTRIBUTES		
	DATA DICTIONARY			
13	CRC	OSS REFERENCE TABLE	13-1	

1 SCOPE

1.1 IDENTIFICATION.

The following is a full identification of the Military Personnel In–Processing (OUTPROC):

- a. Automated Information System (AIS) Identifier, which establishes the base functional components of a system: P09.
- b. System Identification Code (SIC) identifies the software tool methodology that the application is developed: A13.
- c. Title and Abbreviation: Military Personnel In–Processing (OUTPROC)
- d. Previously fielded Release/Version Number: 07.01/07.00.
- e. Software Change Package (SCP) Release/Version number being developed/ fielded: P15-A01-08-00.

1.2 DATABASE OVERVIEW.

The purpose of this database for OUTPROC is to describe the database organization and to provide detailed logical and physical database information necessary to construct the parts of the OUTPROC relational database such as records, tables keys, views and associated directories, and diagrams.

The OUTPROC database is identified by "outproc" and is working database containing all OUTPROC data elements required to support the OUTPROC. This working database is called the subject area database (SADB) throughout OUTPROC documentation.

The ISM Project was established to create new software applications (or upgrade existing ones) that would automate standard procedures and integrate information used to manage army installations. These software applications are packaged as modules according to the installation management functions they perform. ISM is deployed army-wide and comprises a uniform set of automated tools that assists installation commanders in effectively managing daily operations.

OUTPROC is part of the ISM Project, which is an army-wide Major Automated Information System (MAIS) initiative. The primary objective of ISM is to enhance, through automation, installation management functions. ISM applications consist of standard procedures packaged into functional applications, which automate as well as integrate day-to-day installation processes. ISM applications use Installation Level Integrated Database (ILIDB), which is the central repository for data that is common to more than one ISM application, and various local databases that contain data elements unique to the individual ISM applications.

ISM operates at garrison locations and support functional managers use of ISM applications and data to manage resources under their control. ISM performs the following major functions:

- Application-specific support to meet the information needs of installation functional activities and tenant units;
- Command and staff reporting requirements via standard or ad hoc queries run against an application database or the ILIDB; and
- Information exchanged internally among installation functional activities and externally to echelons above installation levels, as well as to Standard Army Management Information Systems (STAMIS).

OUTPROC is an automated system used by authorized military personnel to collect and store information required for effective administration of out-processing management and out-processing scheduling.

1.2.1 Organizational and Personnel References.

The following organizations and personnel maintain a responsibility of interest in the ISM application.

- a. <u>ISM Functional Proponent</u>. The ISM Functional Proponent (FP) is the Office of the Director of Information Systems for Command, Control, Communications, and Computers (DISC⁴).
- b. <u>Application Sponsor</u>. The application sponsor is the Director of Management (DM) Office Chief of Staff, Army (OCSA).
- c. <u>ISM/MISM_FP</u>. The ISM/MISM_FP is the Office of the Director of Information Systems for Command, Control, Communications, and Computers (DISC⁴).
- d. <u>Assigned Responsible Agency (ARA)</u>. The ARA for technical development, testing, fielding and maintenance of this ISM application is the Information Systems Engineering Command (ISEC).
- e. Point of Contact.

Organization: U.S. Army Information Systems Software Development Center

- Washington DC (USAISSDC-W)

ATTN: AMSEL-SE-IS-SDW-E-I, Stop H-5, 6000, 6th St.,

Suite S122A, Ft. Belvoir, VA 22060-5576

Point of Contact: Major Gale Harrington

Commercial Phone: (703) 275-6941 DSN: 235-6941

1.3 DOCUMENT OVERVIEW.

The objective of this DBDD Manual for OUTPROC is to describe the design of OUTPROC database, that is, a collection of related data stored in one or more computerized files in a manner that can be accessed by users or computer programs via a database management system (DBMS). This also describes the software units used to access or manipulate the data. Use this DBDD as the basis for implementing the database and related software units. It provides the acquirer visibility into the design and provides information needed for software support.

1.3.1 Security.

OUTPROC does not store or process classified data. OUTPROC data is designated as unclassified sensitive-two (US-2), as defined in Army Regulations (AR) 380-19, "Information Systems Security (ISS)," 01 May 1996. This data is "For Official Use Only (FOUO)", and prohibits unauthorized disclosure.

- a. <u>Authorization</u>. An explicit official authorization or an implicit authorization based on official assignments and/or responsibilities is required to access OUTPROC.
- b. <u>Disclosure</u>. You must not disclose personal information contained in OUTPROC except as authorized by AR 380-19.

1.3.2 Security Guidelines for Using OUTPROC.

The following guidance is provided to help users operate the system in accordance with applicable security provisions.

1.3.2.1 Modifying or Viewing Data.

Entering, modifying, deleting, or viewing OUTPROC data is restricted to users, who have explicit authorization to do so. System access is gained using a combination of login name, password, and access permission, which is determined by the system administrator. Login names and passwords shall be used only by the persons to whom, they were specifically, assigned.

- a. Screens. Adjust your Video Display Terminal (VDT) screen so that informational displays can not be viewed by any unauthorized person.
- b. Accuracy. Enter or modify data carefully and completely, to avoid storing or transmitting erroneous or incomplete data.

1.3.2.2 Protecting Information Sources.

Safeguard all information input to or generated by the system against unauthorized use, copying, or destruction.

- a. <u>Documents</u>. Prevent unauthorized persons from viewing or accessing any documents, such as forms or manual files, by covering them or storing them in secure containers.
- b. <u>Electronic Media</u>. Label all electronic media, such as tapes or diskettes, and keep them in proper storage containers.

1.3.2.3 Other Theft.

This type of threat concerns the physical misappropriation of the computer containing the application program and its data bank/database. The system includes safeguards such as encryption of data elements, if appropriate, to prevent sensitive data from falling into the wrong hands by physical misappropriation of the system hardware.

1.3.2.4 Service Interruption/Degradation.

This type of threat is normally related to scheduled or unscheduled availability of the system to run the application as intended. The disruption may be due to power outages, environmental situations, etc. The system provides safeguards for restoring systems abnormally terminated/shut down.

1.3.2.5 Human Errors of Commission and Omission.

User carelessness or ignorance is responsible for this type of threat. The system provides safeguards by automatically performing edit checks for enumerated values, acceptable ranges, etc.

1.3.2.6 Privacy Violations.

This type of threat involves unauthorized release of personnel information protected under the Privacy Act of 1974, Section 5, United States Code 552a. Data elements identified as protected under the Privacy Act are safeguarded by the system through encryption, user access levels, or other controls as appropriate.

1.3.2.7 Sabotage.

An authorized user deliberately erasing or otherwise destroying system data files and/or back up file media must be prevented. The system periodically determines duration between system sessions and last system backup. The system also requires a backup to be generated if some predetermined number of sessions has occurred without the operator voluntarily performing a backup operation. The backup ensures that at least three separate backup copies are maintained. The system cycles these copies interactively.

1.3.2.8 Industrial/Military Espionage.

This threat normally involves a former user gaining access to the system for personal benefit. The system

provides safeguards to require inactive USERID to be deleted from the system. The system also requires periodic mandatory change of authorized user passwords.

WARNING:

IT IS A VIOLATION OF FEDERAL LAW TO ACCESS, COPY, OR OTHERWISE USE GOVERNMENT COMPUTER RESOURCES WITHOUT SPECIFIC AUTHORIZATION. EACH ACCESS IS SUBJECT TO RECORDING AND AUDITING.

1-4

2 REFERENCED DOCUMENTS

2.1 PROJECT REFERENCES.

The following documents are helpful in understanding and performing the tasks described in this manual.

a. <u>Project Request.</u> U.S. Army Management Directorate, AISM 25-P15-A01-OSE-FD, "OUTPROC Functional Description" dated 30 November 1992.

b. Project Documentation.

- (1) U.S. Army, AISM 25-P15-A01-AIX-SUM, "OUTPROC Software User Manual (SUM)," UNCLAS.
- (2) U.S. Army, AISM 25-P15-A01-AIX-SCOM, "OUTPROC Software Center Operator Manual (SCOM)," UNCLAS.
- (3) U.S. Army, AISM 25-P15-A01-AIX-SIP, "OUTPROC Software Installation Plan (SIP)," UNCLAS.

c. Hardware Documentation

- (1) IBM POWERstation and POWERserver Diagnostic Information for Micro Channel Bus Systems, Version 4.2 Part No. SA23-2765-01.
- (2) IBM Adapters, Devices, and cable Information for Micro Channel Bus Systems, Version 4.2 Part No. SA23-2764-01.
- (3) IBM 7012 Models 300 Series Installation and Service Guide Part No. SA23-2624-07.
- (4) IBM 7012 Models 300 Series Operator Guide Part No. SA23-2623-05.

d. Software Documentation

- (1) "MS-DOS User's Guide and Reference," Version 5.0/6.22.
- (2) AIX Version 4.2 Quick Installation and Startup Guide.
- (3) AIX Version 4.2 Installation Guide Part No.SC23-2341.
- (4) AIX Version 4 Getting Started Part No.GC23-2521.
- (5) AIX Version 4.2 System User's Guide: Operating System and Devices.
- (6) AIX Version 4.2 System Management Guide: Operating System and Devices.
- (7) AIX Version 4.2 Network Installation Management Guide and Reference.
- (8) AIX Version 4.2, Information For Operation Retrieval/License System (iFOR/LS) System Management Guide.
- (9) Oracle7TM for AIX-Based Systems Installation & Configuration Guide, Part No.A32105-1.
- (10) Oracle7TM SQL*Plus User's Guide and Reference, Version 3.1.
- (11) Oracle7TM Server SQL Language Reference Manual, Part Number 778-70-1292.
- (12) A Technical Introduction to the Oracle Server in the "Oracle7TM Server Concepts Manual".

3 DATABASE-WIDE DESIGN DECISIONS

3.1 DESIGN DECISIONS.

To satisfy OUTPROC requirements, it is necessary to perform a variety of functions. These functions fulfill various objectives considered in designing OUTPROC. Design decisions incorporating all necessary functions and related considerations were instrumental in the development of OUTPROC to assure the system could use the database in the manner proposed. Among these functions and considerations are interactive responses, help text, error messages, input data, outputs, including reports, response time to queries and updates, data storage capacity, system maintenance and data backups. OUTPROC provides a series of interactive and detailed menus, which allow users to enter change or review data necessary to support daily activities. Users may interactively access data through ad hoc queries using Structured Query Language (SQL) or standardized queries.

3.2 DATABASE IDENTIFICATION.

The OUTPROC database is identified by "outproc" and is a working database containing all OUTPROC data elements required to support the OUTPROC ISM. This working database is called the SADB throughout OUTPROC documentation.

3.2.1 Systems Using the Database.

The OUTPROC is a stand alone system, and is the only application that interfaces with the RUU SADB except for the Installation Level Integrated Database (ILIDB), which shares personnel information used among all the ISM. However, this does not preclude the possibility that future versions of the OUTPROC SADB will interface with other ISM and Standard Army Management Information Systems (STAMIS).

3.2.2 Relationship to Other Databases.

OUTPROC will supersede the current field systems, which use either a manual paper tracking process, or in some instances, "home-grown" automated systems.

3.3 RDBMS.

OUTPROC is designed using a Relational Database Management System (RDBMS) that will:

- a. allow installation-unique tables and attributes
- b. provide integration with other portions of the installation central data repository previously developed.
- c. use data elements standardized IAW AR 25-9.

The data elements used for OUTPROC are identified from the FD, the Structured Requirements Analysis Planning (STRAP) reports, the STRAP key-based data model, the Joint Application Development sessions, and the Prototyping sessions. Other sources include existing databases, reports, forms, user manuals, and other data stores maintained by the functional organization. These data elements are fully defined in the Army Data Dictionary (ADD), and Automated Dictionary Support System (ADSS).

3.3.1 RDBMS Configuration.

The "outproc" SADB is a relational database that may reside on any RDBMS that runs under the UNIX operating system environment and supports American National Standard Institute (ANSI) SQL. The "outproc" SADB is currently being implemented for UNIX using the Oracle7^{TM*} SQL RDBMS, Version 7.3.3.

3.3.2 Hardware Configuration.

The "outproc" SADB will reside on Portable Operating System Interface for Computing Environments

(POSIX) compliant hardware. The installation hardware being used consists of a IBM RISC/6000 Model 7012-300 series computer containing all hard drives, backup tape drives, the system board, network interface cards (NIC), Random Access Memory (RAM), and necessary processors.

- a. Memory. The IBM RISC 6000 POWERstation and POWERserver System can be configured with as little as 64 megabytes (MB) or as much as 640 MB of 70 nanosecond (ns) RAM (in 64 MB increments). This RAM is based on industry standard 4 MB SIMM and proprietary RAM expansion boards, which can be added at the factory or any time after delivery.
- b. Central Processing Unit (CPU). The IBM RISC 6000 POWERstation and POWERserver System can contain either two or four processors. These are the Reduced Instruction Set Computer (RISC) integer unit and floating point unit processors. For ITP purposes the 'four processor' configuration is being used.
- c. Bus. The IBM main processor bus is 64 bits wide with a bandwidth of 80 Mbps.
- d. Tape Device. An 8mm tape drive is required for the tape distribution of Oracle. The tape drive block size should be set to 512.
- e. Small Computer System Interface (SCSI) Devices. All SCSI-controlled peripheral devices, such as compact disk read only memory (CD ROM) drives, 8 millimeter (mm) tape drives, 1/4 inch tape drives are connected directly to the SCSI subsystem. Internal SCSI drives are connected using the on-board SCSI port.
- f. Controller. SQL*Net TCP/IP requires an adapter card that will support TCP/IP.

3.3.3 Database Software Utilities.

The following list of reference manuals gives detailed instructions on using Oracle7TM database software utilities.

- a. Oracle 7^{TM} for AIX-Based Systems Installation & Configuration Guide, Part No.A32105-1.
- b. Oracle7TM SQL*Plus User's Guide and Reference, Version 3.1
- c. Oracle7TM Server SQL Language Reference Manual, Part Number 778-70-1292.
- d. "A Technical Introduction to the Oracle7TM Server" in the "Oracle7TM Server Concepts Manual".

3.3.4 Security.

The security of database components, such as user views of schema, is controlled by the Subject Area Functional Administrator (SAFA) who grants, or denies access permissions using the OUTPROC administration menu. This application level security is augmented by other levels of system security before entering OUTPROC.

3.4 INPUTS AND OUTPUTS.

OUTPROC is to be used as an interactive application. This means that it is designed for access and use from a terminal. OUTPROC gets data residing in the application's specific SADB; however, OUTPROC may also retrieve input from the ILIDB. Initially, the majority of the data input will be from the end user. But as users are added to the common SADB more and more of the data needed would be provided. In regard to output, reports will require you to specify a range of dates to begin and end the report. This is also true with making queries. Other times, you will provide a social security number (SSN) to locate specific information for an individual.

3.4.1 Inputs.

OUTPROC is able to receive input data via magnetic media (diskette or tape) or electronic data

transfer, either on-line directly from another system or via modem and download.

3.4.2 Outputs.

Production devices authorized to receive output will be determined by USERID and passwords. Output devices may be located within a local area network (LAN) and will consist of various models of both line-system printers and personal computer "slave" dot-matrix/laser printers. Output will also be provided to 28.8, 14.4, 9.6, and 2.4 KBPS modems for transmissions to external system printers and screens. Output may also be provided to exportable magnetic media such as floppy diskette or cartridge tape.

3.4.3 Response to Inputs and Queries.

Response time extends from the receipt of input data to the availability of products. OUTPROC edits interactive transactions and update tables on-line. Both invalid codes and inconsistent data elements (transaction and resident) are corrected at the time of input. The data will then be immediately available to all processes and sub-processes.

- a. Response time to queries and updates.
 - (1) Queries and updates for data input/update on an individual record will have an immediate response time of not more than one second, ninety percent of the time. This response time is the target for a directly connected device, which are not confused with communication-related lag times-communication lags attributed to dial-ins, communication controllers, multiplexors (MUXs), concentrators, LANs, etc. This target response time is a database design requirement.
 - (2) Queries and updates on multiple records provide adequate response in not more than one second, ninety percent of the time. These transactions take place within an installation, assuming adequate application connectivity is in effect.

3.4.4 Interfaces.

OUTPROC interfaces with the ILIDB, RUU and to the Standard Installation/Division Personnel System (SIDPERS).

3.5 DATABASE/FILE APPEARANCE.

The data elements for OUTPROC are integrated into a multifunctional database as part of the ISM-wide data architecture. By accessing this data architecture, each function within has a view of its data. This view will consist of multiple data elements that are contained in a row of one or more tables.

3.6 LABELING CONVENTIONS.

The OUTPROC SADB is identified as "outproc". Tables will have an owner identification of "outproc", and the table names will be identified uniquely depending on the data/function they are related to.

3.7 ORGANIZATION OF THE DATABASE.

The "outproc" SADB has been designed using relational logic to reside on any RDBMS that runs under the AIX operating system version 4.2 environment and supports ANSI SQL. The current "outproc" SADB is implemented on Oracle7TM RDBMS version 7.3.3. Oracle7TM is an integrated multiuser package that can operate in a stand alone microcomputer environment.

3.7.1 Physical Allocation.

The physical allocation of the database is determined by the Systems Administrator (SA). Allocation is

determined by physical disk space, number of transactions, and various performance need.

3.8 DATABASE MANAGEMENT USED.

The OUTPROC ISM runs on any UNIX platform using SQL-compliant RDBMS.

3.8.1 Flexibility.

The OUTPROC application design provides flexibility in five ways:

- a. OUTPROC functions are independent of organizational structure. Functions are based on processes rather than people; therefore, it can easily withstand organizational structure changes. A principal design consideration will incorporate functional modularity to facilitate timely implementation and system maintenance. Additional items or functions will be added, or changes made to the existing support module, if necessary. An Automation Working Group (AWG) has been established and will function as a clearinghouse for major support module changes as well as a quality assurance group. The AWG will work closely with the ISM FP in his position as chairman of the ISM Configuration Control Board (CCB).
- b. The OUTPROC functional design minimizes dependence on the technical environment. OUTPROC was designed functionally to be as independent of the technical environment as possible. The technical environment (e.g., hardware, Word processor software, DBMS) may change over time; the OUTPROC functional design will not.
- c. OUTPROC is table driven. Wherever practical, OUTPROC maintains system parameters likely to change or vary between sites in reference tables.
- d. Flexibility at individual installations is achieved through data manipulation by those authorized access to the support module.
- e. As a system, OUTPROC is designed to accommodate changes in requirements and/or its operating environment. During the design of this system, enhancements and changes in requirements have been incorporated periodically.

Because OUTPROC is designed to use relational database technology, changes in structure and data are more easily accomplished. With this consideration in mind, the system is designed with a maximum amount of flexibility so as to adapt to future changes quickly and easily.

3.9 SECURITY.

The ISM Security Support Plan (SSP), in accordance with AR 380-19, Information Systems Security (ISS), and DOD 5200.28-STD, DOD Trusted Computer System Evaluation Criteria (TCSEC), categorizes the information processed by OUTPROC as unclassified-sensitive two (US-2). This means that OUTPROC processes unclassified information, which must be protected primarily to ensure its availability or integrity. Care should be taken to ensure that passwords are protected and that access to information in the OUTPROC system, or reports produced by it, are not disclosed improperly or accidentally. Regulations require that each user be issued a unique USERID and password. All privileges of access and other authorization elements are associated with the USERID. The combination of user identification and accompanying authorizations are maintained in he USERID profile for each user.

A password is the protection mechanism by which the computer authenticates the user's identity and authorization to access information and functions as delineated in the USERID profile. OUTPROC automatically denies any request for use of a privilege or access unless that USERID has been specifically granted that privilege or access.

Users have access to all the information they are entitled to (by virtue of formal access approval) and no more. Access to OUTPROC data is restricted to users that have at least "connect" permission to the "outproc" SADB or the ILIDB. Persons having Database Administrator (DBA) permission authority

can grant any level of permission, such as "connect," "resource," or "DBA," to other users, so access to these user accounts is strictly controlled through security administration.

The information contained in this application is designated as unclassified sensitive-two (US-2). US-2 is unclassified information, which primarily must be protected to ensure its availability and/or integrity. This information also requires protection from unauthorized personnel to ensure confidentiality. Examples of US-2 include information dealing with logistics, medical care, personnel management, Privacy Act data, contractual data and *FOUO* information.

Menu presentation is sensitive to user authorized access levels and only display those menu choices that the user has authorized access. Similarly, if the user accesses a menu selection for which there is no data, (such as print a report for which there is no data in the database), then the application directly informs the user that no data is available for the report before the user sends the report request to the printer or screen.

All data, which is subject to the Privacy Act, pursuant to Public Law 93-579, is handled in such a manner as to preclude unauthorized release of the information. The OUTPROC support module contains sensitive, unclassified data.

3.10 DATABASE DISTRIBUTION, UPDATES AND MAINTENANCE,

Design decisions on database distribution, updates and maintenance relate to the host computers at the installations, which provides ISM application processing databases for client users, who gain access through workstations.

3.10.1 Distribution.

The support module distributes output products as on-line response to a process; electronic distribution (electronic mail, packet-switching transfer, and downloading) of a hard copy listing; or by printing and mailing of hard copy reports. The vulnerability to be guarded against in any distribution and disposition system is that the distribution can be made to an unauthorized position or person and an incomplete document can be delivered. Additionally, premature disposition can hamper validation and error correction

3.10.2 Maintenance.

The system functional area supports the administration and maintenance of the automated OUTPROC. This includes user account management, system backup and restore, generation of transactions, and correction of individual identifiers throughout the system. The successful operation of maintenance depends on the SA who performs regular system backups and can restore the database, if the OUTPROC fails. When the SA performs a complete backup, all of the data in the OUTPROC are copied onto a file in a suitable backup media. Later the database may be restored to its state the day of the backup, by restoring only this file. This copy defines a baseline from which incremental (or partial) backups may be made. As the amount of data in the local database becomes very large, only a small percentage will be changed each day. If the SA performs an incremental backup, only the data that have changed since the last backup are copied to the backup medium. Incremental backups may be made several times after one complete backup. In the event of major data corruption, the complete backup is restored first. Then, each incremental backup is restored, in succession, until the database is restored with the contents as of the desired day. Occasionally, as the number of incremental backups increases, the SA will perform another complete backup to establish a new baseline date; the incremental process is then repeated.

3.10.3 Integrity.

The OUTPROC is an unclassified, administrative system used to assist out processing clerks in processing army soldiers and their families upon departure from an installation. It is assumed that the

most likely threat to OUTPROC data integrity is authorized users attempting to falsify data concerning the personnel. The risk of unauthorized penetration of the system by outside parties is considered low. The installation ISM SA will be responsible for computer hardware and software integrity. Backup and recovery are the most critical aspects of those responsibilities.

3.11 BACKUP AND RESTORATION.

Maintaining an alternative file storage area provides protection against delays, destruction of software and data. This storage level is mandatory for all Data Processing Installations (DPI) that provide critical AIS support to the organizations' mission performance. This requires off-site storage of at least one copy of all AIS files, programs, and procedures necessary to operate all high-priority applications, either at the processing site or at an alternate site. The alternate files storage area should be reasonably close to the processing site, but not subject to the same degree of major threat as the original site. It is usually recommended that the alternate files storage area be located at least one mile from the processing site.

3.12 STORAGE REQUIREMENTS.

Storage requirements for OUTPROC workstations and file server were estimated for two specific areas. The data storage requirements were determined based on limited sizing information including size of installation and projected number of transactions. The second area considered in estimating data storage requirements was the requirement for the system's operational capacity. Estimates for this type of data storage include requirements for the AIX OS version 4.2 OUTPROC application and Oracle7TM database software, since all are necessary for OUTPROC operation. The IBM RISC/6000 Model 7012-300 series System can be configured with as little as 64 megabytes (MB) or as much as 640 MB of 70 nanosecond (ns) RAM (in 64 MB increments). This RAM is based on industry standard 4 MB Single Inline Memory Modules (SIMM) and proprietary RAM expansion boards, which can be added at the factory or any time after delivery.

3.12.1 Physical Mapping of Database Tables.

The OUTPROC SADB is stored on disk in the form of relational tables. The OUTPROC tables are mapped to the ILIDB database, which contains general military personnel information shared by other ISM.

4 DETAILED DESIGN OF THE DATABASE

4.1 **DESIGN METHODOLOGY.**

The OUTPROC was designed using a structured methodology. This design and development effort included data modeling, normalizing to third normal form, and tuning the finalized data structure for the sake of efficiency. The organization of data and the use of standard data manipulation languages, such as INFORMIX, ORACLE and ANSI-SQL, allow for easy portability to other platforms. RDBMS is an important component in this design since its advantages are numerous.

4.1.1 Content.

There is no subordinate schema within OUTPROC, and it uses shared personnel data from the ILIDB database.

4.1.2 Description.

For a description of the OUTPROC schema, with its physical data element description including indexes and keys, refer to Sections 10, 12, and 13. All access restrictions are determined by the DBA.

4.1.3 Physical Structure.

Refer to Section 10.

4.1.4 Sizing.

Sizing is dependent on the workload and capacity of each installation. The number of records and transactions processed within each installation determines the amount of storage required for each installation's "outproc" SADB. This is monitored by the OUTPROC DBA.

4.1.5 Recovery.

Local policy and the operational environment control the frequency of backups. At a minimum, the total "outproc" SADB is backed up at least once a day. OUTPROC is an on-line processing ISM requiring no restart procedures within the application software.

The Oracle7TM RDBMS supports automatic rollback of all partially completed transactions resulting from hardware or software failures. All users performing data manipulation operations at the time of the failure are required to check the last activity performed to ensure that the transaction(s) were affected. Transactions entered prior to the last backup will be captured in the transaction log. If the "outproc" SADB is destroyed, it can be rebuilt by first restoring it from the latest OUTPROC backup tape followed by executing the transactions in the transaction log.

The DBA will assist functional users during restart/recovery procedures. For detailed information on SADB backup and recovery utilities, such as DBEXPORT, DBIMPORT, and DBSCHEMA, refer to Oracle 7 On-Line Administrator's Guide, Version 3.1, and Oracle 7TM On-Line User's Guide, Version 3.1.

4.1.6 Requirements Cross - Reference.

Cross-reference information obtained from Section 3 of the OUTPROC FD and Section 4 of the OUTPROC System/Subsystem Specification (SS) follows:

OUTPROC FD OUTPROC SS

Section 3.3 Inputs/Outputs

N/A
Section 3.4 Database/Data Bank Character

N/A

4.2 TABLE INFORMATION.

4.2.1 Rationale.

One of the most important features of a RDBMS is its ability to join data from different tables. Instead of storing identical data in several tables, an RDBMS allows access to data from several tables at once and displays it as if it were stored in a single table. Joining lets you rearrange the view of a database and create new relationships. You can expand the scope of a database by joining new tables to existing tables.

4.2.2 Content.

Section 10 contains the table names, data elements, and their attributes. The data dictionary is contained in Section 12.

4.2.3 Description.

Refer to Section 12.

4.2.4 Storage Control Parameters.

Database/table parameters will be determined by the following:

- a. Requirements of the database, such as number and content of tables and records.
- b. Storage available.
- c. Oracle7TM database documentation (procedures/instructions for creating and

administering a database).

4.2.5 Recovery.

Local policy and operational environment control the frequency of backups. At a minimum, the total "outproc" SADB is backed up at least once per day. OUTPROC is an on-line processing ISM requiring no restart procedures within the application software.

The Oracle7TM RDBMS supports automatic rollback of transactions partially completed due to hardware or software failures. Each user performing data manipulation operations at the time of failure must check for the last active transaction to determine what transaction must be done again.

Transactions conducted since the last backup is captured on a transaction log. If the "outproc" SADB is destroyed, it can be rebuilt by first restoring the latest backup and then executing the program which will apply the transaction log tape to the "outproc" SADB. All work would be restored except for any transactions not captured on the transaction log.

The application DBA/SA will assist the functional users during restart/recovery procedures. The installation DBA/SA will assist functional users when necessary.

For detailed information on database backup and recovery utilities, such as DBEXPORT, DBIMPORT, and DBSCHEMA, refer to Oracle7TM On-Line Administrators Guide, Version 3.1, and Oracle7TM On-Line Users Guide, Version 3.1.

4.3 DATABASE DESIGN LEVEL.

The modelling levels presented here are suited to a top- down system development life cycle, in which successive levels of detail are created during each project phase. The highest level models come in two forms:

- Entity Relationship Diagram (ERD) and
- The Key Based (KB) Model

The ERD form identifies major application entities and their relationships. The KB model represents a third form relational model, which sets the scope of the application information requirement and delineates the detail.

The DBMS model adopted for this application is the area level information model. This model provides the "Area" scope for the integrated system.

An Area information model covers a broad application area, which is usually larger than the application single automation project. This model consists of both the ERD and KB model.

The ERD is a high level information model, which shows the major entities and the relationships that support a wide application area. The objective of the ERD is to provide a view of application information requirements sufficient to satisfy the need for broad planning and development of its information system.

The KB model, is the third normal form information model that describes the major data structures supporting a wide application area. The objective KB model provides a wide application view of data structures and those keys needed to support the area. This model provides a context in which detailed implementation level models are constructed. The model covers the same scope as the ERD, though in greater detail.

4.4 SUPPORT SOFTWARE AVAILABLE FOR HANDLING THE DATABASE.

The objective configuration OUTPROC ISM will adhere to open systems architecture. Data information needs require the database management software to use a relational database with ANSI SQL capabilities. To enable interconnection to existing systems, X.25 with TCP/IP, Telnet, 3270

Systems Network Architecture (SNA) and standard synchronous and asynchronous communications software are required.

The current Army installation software environment is composed of DATACOM/DB, ROSCOE, CICS, UNIX/XENIX, MS-DOS, ORACLE, SQL/DS, XDB, DB2, IBM VM/VMS or VM/VSE operating system environment, COBOL and C compilers, in addition to other packages.

The Open Systems Environment (OSE) complies with the following:

- a. Operating System:
 - Multi-user, multi-tasking
 - POSIX compliant
 - Diagnostics/monitoring/control capabilities are accessible from a remote control center
 - ADA/SQL/GOSIP bindings are available
- b. Access Control Mechanisms:
 - Keyed to users (by userid)
 - Managed by a data administrator and a security officer
- c. Program Support:
 - ADA and APSE support
 - On-Line documentation available
 - 4GL/5GL applications generator available
 - SQL-compliant database access standard

The following are examples of software available for handling the database:

- a. Database analysis tools for reorganizing or changing data include a database definition and manipulation language that is an extension of the ANSI standard SQL.
- b. The DB-Monitor software utility is available for the initialization or resizing of the database. This program allows the set up of the initial operating parameters including the server number, maintenance of logical logs and archives, tuning the Oracle7TM On-Line parameters to use disk, memory, and recovery features effectively, and observe status of the system.
- c. Database utilities for saving and restoring the database and its data include dbexport, dbimport, dbschema, tbload, tbunload. These utilities are explained in detail within the Oracle7TM OnLine Administrator's Guide, Version 3.1.
- d. Oracle7TM OnLine has facilities to handle failures of both mirrored and non-mirrored media. For example, when the failed medium is mirrored and the primary disk partition, called a chunk is repaired or replaced, the DBA then executes INFORMIX-OnLine to recover the chunk, and then it is brought on-line. For explicit details on recovering mirrored and non-mirrored media, reference Oracle7TM On-Line Administrator's Guide, Version 3.1.

5 SOFTWARE UNITS USED FOR DATABASE ACCESS OR MANIPULATION

5.1 DATABASE ACCESS AND MANIPULATION.

Only users who have explicit authorization are allowed to enter, modify, delete, or view OUTPROC data. The SA administrates the system access using a combination of login name, password, and access permissions. Only, persons to whom login names and passwords are specifically assigned by the SA shall use them. It is through the "OUTPROC Initialization/Admin Menu" that the OUTPROC administrator controls which user LOGIN ID has access to the specific OUTPROC functions.

5.2 CURRENT ARMY INSTALLATION SOFTWARE ENVIRONMENT.

The current army installation software environment is comprised of DATACOM/DB, ROSCO, CICS, UNIX/XENIX, MS-DOS, ORACLE, SQL/DS, XDB, DB2, IBM VM/MVS or VM/VSE operating system environment, COBOL compilers, C compilers, and many other packages.

5.2.1 Software Units.

This paragraph has been tailored out. The software units that access or manipulate the database are described in "Software Design Descriptions (SDD).

5.3 SOFTWARE ENVIRONMENT.

The OUTPROC ISM runs on any UNIX System V platform against an SQL-compliant RDBMS. Terminals may consist of any ANSI 3.64 type or a personal computer (PC) with a similar emulation program. Printers, modems, and other peripherals will be site specific.

To successfully execute OUTPROC, the system environment should consist of the hardware, software, and utilities designated in paragraphs 5.3.1 and 5.3.2.

NOTE: This ISM application is not dependent upon any one particular model of computer. The hardware described in the following paragraphs is one of the configurations possible for operating the OUTPROC application.

5.3.1 Hardware Required.

Hardware configurations required to support OUTPROC are:

- a. Computer. IBM RISC/6000 39H.
- b. <u>Local Computer Workstation</u>. 386/486/586 class personal computer, a keyboard, a monitor, power strip/surge suppresser, communications interface.
- c. <u>Printers</u>. For reports high-resolution dot-matrix impact printer, with RS-232 serial communications interface and 132 column wide format.

5.3.2 Software Required.

The software required, to run, OUTPROC ISM includes:

- a. Operating System (OS). AIX OS Version 4.2 Release Manual. The operating system supervises the work of the computer and provides software utilities.
- b. RDBMS. ANSI SQL-compliant relational database management system (such as Oracle7TM ESQL/C Version 7.3.3). The database is a collection of data, information about indexes, and system catalogs that describe the structure of the database.
- c. <u>ISM Application</u>. This is the OUTPROC application software that is used in host mode.
- d. <u>Local Operating System.</u> MS-DOS 5.0/6.22 disk operating system. This operating system controls the work of the local installation computer and provides local mode software utilities.

e. <u>Local Communication Software</u>. Various types of communications protocol software may be used, depending on your installation configuration. This software formats, arranges data for transmission and controls the transfer of data between computers.

5.3.3 Database/Data Bank Characteristics.

OUTPROC is designed using a RDBMS that will:

- a. allow installation-unique tables and attributes.
- b. provide integration with other portions of the installation central data repository previously developed.
- c. use data elements standardized in accordance with (IAW) AR 25-9.

The data elements used for OUTPROC are identified from the FD, the STRAP reports, the STRAP key-based data model, the Joint Application Development sessions, and the Prototyping sessions. Other sources include existing databases, reports, forms, user manuals, and other data stores maintained by the functional organization. These data elements are fully defined in the ADD/ADSS.

The data elements for OUTPROC are integrated into a multifunctional database as part of the ISM-wide data architecture. By accessing this data architecture, each function within has a view of its data. This view will consist of multiple data elements that are contained in a row of one or more tables.

5.4 DATA INTERFACES.

The information that follows shows the context of OUTPROC within the universe of STAMIS and systems with which it interfaces. These interfaces are described below, listed in priority order of establishing the interfaces.

- a. ILIDB. The OUTPROC-ILIDB interface is mandatory and of critical importance. OUTPROC will receive selected personnel-related data elements from the ILIDB providing common-use information such as name, rank, location, etc., upon the identification of the soldier by a key field, such as SSN or its derivative. The ILIDB interface is to be read-only, i.e. OUTPROC will, upon demand, solicit information from the ILIDB but will not attempt to update ILIDB data. However, an easy-to-use, reliable, and timely method is required to effect corrections in the ILIDB and its source databases in cases where incorrect data are discovered and verified
- b. MACOM/HQDA. This interface requirement includes the ability to send summary data from an installation to its parent MACOM and to HQDA. This interface is two-way; the requirement exists to receive data from the MACOM and HQDA level. An electronic mail (E-mail) capability is available to link installation users to the MACOM and HQDA.
- c. <u>RLIU</u>. The interface is two ways; though in most instances OUTPROC receives data from RUU.

5.5 ERROR HANDLING.

With each SQL statement, OUTPROC checks whether an error has occurred. If one has occurred, a message is sent to the user in a form similar to the following:

SQL ERROR:

ERROR: -284 A Database Error has occurred. Please contact your database administrator to take the required action.

Refer to Oracle-SQL Reference Manual, version 7.0.

5.6 MESSAGES.

OUTPROC error messages are listed alphabetically by label in Section 9. Where the necessary corrective action is not self-explanatory, an explanation is given.

6 REQUIREMENTS TRACEABILITY.

Information pertaining to this section is currently unavailable.

7 NOTES

7.1 SPECIAL INSTRUCTIONS.

The following document references contain instructions to be followed by personnel who generate the "outproc" SADB and use it for testing and operations. These references include Oracle7TM documentation that gives specific information about Oracle7TM database administration.

- a. Oracle 7^{TM} for AIX-Based Systems Installation & Configuration Guide, Part No.A32105-1.
- b. Oracle7TM SQL*Plus User's Guide and Reference, Version 3.1
- c. Oracle7TM Server SQL Language Reference Manual, Part Number 778-70-1292.
- d. "A Technical Introduction to the Oracle Server" in the "Oracle7TM Server Concepts Manual".

7.2 DATABASE SOFTWARE UTILITIES.

The following list of reference manuals gives detailed instructions on using Oracle7TM database software utilities.

- a. Oracle7TM Server documentation.
- b. Oracle7TM Tools documentation.
- c. Oracle7TM Server Concepts Manual.
- d. Oracle7TM Server Utilities User's Guide.
- e. Oracle7TM Server Administrator's Guide.
- f. Oracle7TM Server SQL Language Reference manual.
- g. Oracle7TM Server Messages and Codes manual.

8 TERMS AND ABBREVIATIONS

o TERMS MAD ADDREVIATION	
Terms	•
	A large continuous section of disk space for Oracle-On Line.
	Storing the same data on two disks simultaneously.
Transaction	A collection of one or more SQL statements that is treated as a
	single unit of work.
Transaction Log	Called a logical log. A file containing a list of all changes that
-	were performed on a database during the period the log was
	active.
A 1.1	
Abbreviations.	
Acronyms	
ACSIM	Assistant Chief of Staff for Installation Management
ADD	
AIMS	Army Installation Management System
AIS	
	Automated Information System Manual
	American National Standards Institute
	Army Network Systems Operator Center
AR	
ARA	, ,
AWG	
CCB	
DBDD	
DDN	
DM	
DMC	
DPI	
EPI	
ERD	
FD	*
FOUO	•
FP	
	Installation Level Integrated Database
INPROC	•
ISM	11
	Information Systems Engineering Command
ISS	· · · · · · · · · · · · · · · · · · ·
KB	
LAN	
MACOM	
	Major Automated Information System
MUX	Multiplexors
OCSA	Office Chief of Staff Army
ODISC ⁴	Office of Director of Information System for Command,
	Control, Communication and Computers
OM	Computer Operations Manual
OSE	Open Systems Environment
OUTPROC	

20 September 1990	20	September 1	1998
-------------------	----	-------------	------

PC	Personal Computer
POSIX	Portable Operating System Interface for Computer
	Environment
RAM	Random Access Memory
RDBMS	Relational Database Management System
RUU	Record Update Utility
SA	Systems Administrator
SADB	Subject Area Database
SCOM	Software Center Operator Manual
SIDPERS	Standard Installation/Division Personnel System
SIP	Software Installation Plan
SQL	Structured Query Language
SSN	Social Security Number
STAMIS	Standard Army Management Information Systems
STRAP	Structured Requirements Analysis Planning
SUM	Software User Manual
TSC	Training Support Center
TSO	Training Support Officer
US-2	Unclassified Sensitive - Two
USAISSDC-W	U.S. Army Information Systems Software Development Center
	- Washington DC.

8-3

9 OUTPROC ERROR MESSAGES

OUTPROC error messages are listed below, alphabetically by label. Where the necessary corrective action is not self-explanatory, it is explained below the message.

Appointment Availability Error

The appointment that was selected is no longer available.

Corrective Procedure: Reschedule the appointment.

Appointment Scheduling Conflict

The appointment you are trying to schedule is conflicting with the Work Center appointment for name from time-time.

Corrective Procedure: Reschedule other appointments to resolve the scheduling conflict.

Appointment Status

This soldier does not have an existing appointment with this work center.

Corrective Procedure: No corrective action required.

CANNOT CHANGE

You do not have permission to change information about the num Work Center.

Corrective Procedure: Contact your System Administrator if you need access to this function.

Cannot Delete Item

num cannot be deleted because it has been attached to a least one ssn. Delete from ssn num and any other ssn and return.

Corrective Procedure: Follow the corrective procedure described above.

CANNOT DO SYSTEM CALL TO BUILD REPORT

Corrective Procedure: Contact your System Administrator regarding this message.

Cannot open temp file

The system does not currently allow you to create this file.

Corrective Procedure: Contact your System Administrator regarding this message.

CANNOT OPEN TO FILE

num Filename

Corrective Procedure: Contact your System Administrator.

Check Tape

Make sure your tape or disk is in drive and ready to be used.

Corrective Procedure: Follow the corrective procedure described above.

Database Close Error

When attempting to close the ILIDB database, an error occurred. Contact your system administrator.

Corrective Procedure: Contact your System Administrator regarding this message.

DATABASE ERROR

Line num, error text

Corrective Procedure: Contact your system administrator regarding any database error messages.

Database Open Error

When attempting to open the ILIDB database, an error occurred. Contact your system administrator.

Corrective Procedure: Contact your System Administrator regarding this message.

DB ERROR

Error num

Corrective Procedure: Contact your System Administrator regarding this message.

DB ERROR

Error num on declare cursor

Corrective Procedure: Contact your System Administrator regarding this message.

Duplicate Country Name

There is an existing country name in the database.

Corrective Procedure: No corrective action required.

DUPLICATE OUESTION

The question entered already exists for this Work Center.

Corrective Procedure: No corrective action required.

Duplicate Remark

This is already a remark in the database.

Corrective Procedure: No corrective action is required.

ERROR

Archive Files for OUTPROC were not successfully saved to tape.

Corrective Procedure: Retry to archive the OUTPROC files to a new tape.

ERROR

This person has already been attached to the SSN.

Corrective Procedure: No corrective action required.

ERROR

Code must be in 'two letter' format.

Corrective Procedure: Re-enter the code using the 'two letter' format.

ERROR

Country name must not begin with a blank.

Corrective Procedure: Re-enter the country code without using a blank space as the first character.

ERROR - Access Denied

You do not have access to this area. Talk to your ISM Administrator if you need access to this area.

Corrective Procedure: Contact your ISM Administrator.

ERROR - Access to Work Center

Sorry, you do not have permission to any Work Centers in this section of the ISM. If you feel you need access, please contact your ISM administrator.

Corrective Procedure: Contact your ISM administrator.

ERROR - Cannot Delete User

Cannot delete user. Either user does not exist in the ISM database or you selected the main ISM user to delete. Please try again.

Corrective Procedure: Select a different user to delete.

ERROR - Cannot Modify User

Sorry, you cannot modify this user. Since this is the main user for this ISM, I cannot allow you to change or delete him/her.

Corrective Procedure: Select a different user to modify.

ERROR - No DBA Permission

Sorry, you do not have DBA permission to the ILIDB and DEMOB databases. If you want to have access to this, you must MANUALLY grant DBA permission for both the ILIDB and DEMOB databases. Talk with your DB Administrator if you have any questions.

Corrective Procedure: Contact you DB Administrator for access to the ILIDB and DEMOB databases.

ERROR - No Such Printer

No such printer is defined for this ISM. Please try again.

Corrective Procedure: Define the printer you are trying to use, or select a different printer.

ERROR - No Such USER!

The user entered does not exist in your UNIX system. Please try again.

Corrective Procedure: Ask your System Administrator why this user doesn't exist if you think it should be valid.

Existing Code

Try a different code.

Corrective Procedure: Enter a unique code

Existing Country

Try a different country.

Corrective Procedure: Enter a different country code.

Failure in opening ILIDB

An error occurred in attempting to open the ILIDB database. Contact your system administrator.

Corrective Procedure: Contact your System Administrator.

Failure in opening outproc

An error occurred in attempting to close the ILIDB database, and open the outproc database. Contact your system administrator.

Corrective Procedure: Contact your System Administrator.

FILE OPEN ERROR

WARNING: Unable to open and notify menu file. Contact the system administrator.

Corrective Procedure: Contact your System Administrator regarding this message.

FILE OPEN ERROR

Unable to open the browse menu file. Contact the System Administrator.

Corrective Procedure: Contact your System Administrator regarding this message.

Incorrect Date

The date entered is incorrect or not in the format [YYYY/MM/DD].

Corrective Procedure: Re-enter the date using the format shown above. (Example - January 1, 1992 would be entered as 19920101).

Invalid Begin Date Format

The date entered must be in the correct format YYYY/MM/DD.

Corrective Procedure: Enter the date in the format shown above (example 19920101 is the correct format for entering January 1, 1992).

INVALID DATE

The date entered is a past date.

Corrective Procedure: Enter a date that is in the future.

Invalid Entry

The Out-Processing Cleared field has not been properly filled. Please Enter 'Y' or 'N'.

Corrective Procedure: Enter a 'Y' or 'N'.

Invalid SSN Length

The SSN entered must be 9 digits. Please re-enter.

Corrective Procedure: Re-enter the Social Security Number.

Invalid Social Security Number 1 or 2

Social Security Number not found.

Corrective Procedure: Select a different Social Security Number. This one is not in the ILIDB.

INVALID SSN

The SSN entered is not in the database. A SIDPERS Transfer Data Record Transaction must first be run.

Corrective Procedure: Follow the corrective procedure described above.

INVALID TIME

Appointment Start Time must be from 0000 to 2359.

Corrective Procedure: Re-enter the start time using the criteria listed above.

Invalid Work Center Selection

The work center that you have selected cannot be scheduled yet. All work centers with a numbered order must be scheduled first.

Corrective Procedure: Schedule work centers according the their numbered order. All work centers with a lower order number must be scheduled first.

LIMIT EXCEEDED

The limit in the number work centers has been exceeded. Contact the system administrator.

Corrective Procedure: Contact your System Administrator regarding this message.

LOCATOR - LOCKED SSN

The SSN selected has been locked by another user. Please try again later.

Corrective Procedure: Follow the corrective action described above.

Lock Failure

The attempt to lock the SSN has failed. Please try again later.

Corrective Procedure: Attempt this function in 10 - 15 minutes.

MEMORY PROBLEM num

The allocated memory limit to process 250 questions has been encountered. Unable to display all of the questions for this Work Center. If this limit must be increased, Please submit an ECP to the ISM Administrator.

Corrective Procedure: Follow the corrective procedure described above.

No Data Found

There was no data found for the specified period.

Corrective Procedure: No corrective action is required.

No Disks

No Disk in rSA

Corrective Procedure: Contact your System Administrator regarding this message.

No Item Marked

Use F2 to mark your selection(s), then press RETURN.

Corrective Procedure: Use the F2 key to MARK your selections.

No Items Marked

There were no menu items marked. Mark an item by highlighting it and pressing F2.

Corrective Procedure: Use the F2 key to MARK items, marked items will display a ">" next to item.

No Records

No appointments scheduled during the specified range

Corrective Procedure: No corrective action is required.

No Records Found

There are no records to purge before or after this date.

Corrective Procedure: No corrective action is required.

No Remarks

There are no remarks currently in the database.

Corrective Procedure: No corrective action required.

Out-Processing Completion Date Exceeded

The date num has been set as the Required Completion Date for this soldier. You cannot any appointments after this date.

Corrective Procedure: Appointments must be schedule before the completion date.

RECORD LOCKED

This record num is currently locked. All work has been rolled back try this function later.

Corrective Procedure: The record you are trying to work with is in use a another workstation, attempt this function later.

Selection Warning

No selections were marked for delete. Use the F2 key to MARK selection(s) or the F6 key to CANCEL delete.

Corrective Procedure: Use the F2 key to mark items for deletion, marked items will display a ">" next to them.

Soldier is on HOLD

This soldier is currently on HOLD from Out-Processing and cannot be processed.

Corrective Procedure: Take the soldier off of HOLD if you wish to continue with Out-Processing.

Soldier Not Found

The soldier was not found in the OUTPROC database. Please enter a valid SSN.

Corrective Procedure: Follow the corrective procedure described above.

Soldier is not Out Processing

There is no Out Processing information for the SSN entered. Please initialize Out Processing for the Soldier by running the 'Initialize OUTPROC Record' function.

Corrective Procedure: Follow the corrective procedure described above.

SQL ERROR

Error num UPDATE

Corrective Procedure: Contact your System Administrator regarding this message.

SQL ERROR

Error num declare bad_cur cursor

Corrective Procedure: Contact your System Administrator regarding this message.

SQL ERROR

Error num OPEN DATABASE - Inproc

Corrective Procedure: Contact your System Administrator regarding this message.

SQL SELECT ERROR

Line num, table name

Corrective Procedure: Contact your System Administrator regarding this message.

SYSTEM ERROR

Line num, error text

Corrective Procedure: Contact your system administrator regarding any system error messages.

Unable to Schedule Appointment

An appointment cannot be scheduled for this work center because the appointment is not required.

Corrective Procedure: No corrective action required.

Unable to Schedule Appointment

The OUTPROC ISM is not currently set up to schedule appointments for this work center.

Corrective Procedure: You must define identify this work center as a work center that can accept appointments.

WARNING!

SYSTEM ERROR num

Corrective Procedure: Contact your System Administrator regarding this message.

WARNING!

Unable to remove user's LOGIN

Corrective Procedure: The user's login could not be deleted, if this is a valid login that should be removed contact your System Administrator.

WARNING

There is no data to be archived for these files.

Corrective Procedure: No corrective action is required.

WARNING!

Unable to grant user permissions to the S.A. Database

Corrective Procedure: Contact your System Administrator regarding this message.

WARNING!

Unable to grant user permissions to the ILIDB Database

Corrective Procedure: Contact your System Administrator regarding this message.

WARNING

The soldier has a debt at a work center, which you are trying to unmark. Out-Processing through this work center is required.

Corrective Procedure: Press RETURN to continue.

Work Center Ordering Conflict

There is a conflict between the time slot that you have selected and the num appointment for the num Work Center. This is an ordered work center, Therefore, you must select a time slot that falls after the above time slot.

Corrective Procedure: Follow the corrective procedure described above.

Work Center Ordering Conflict

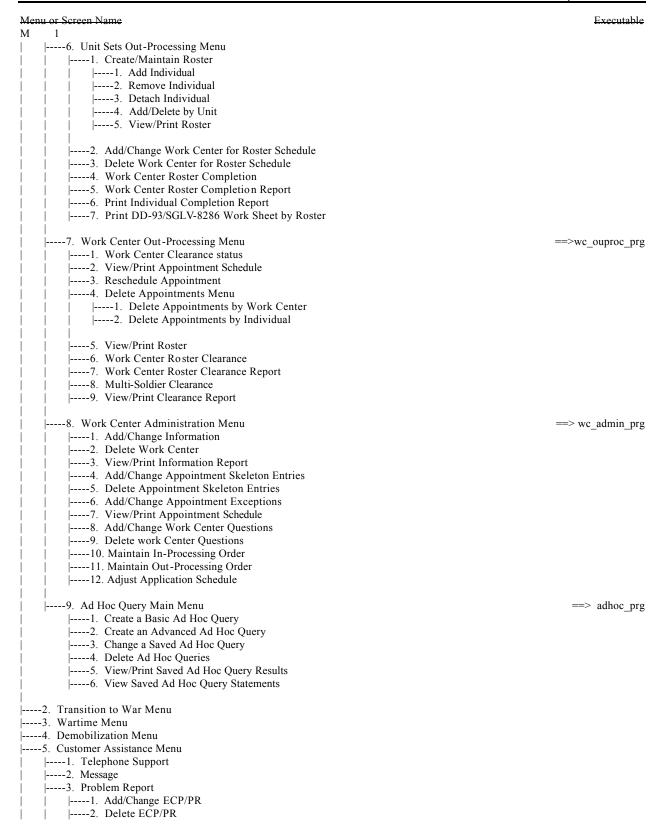
There is a conflict between the time sbt that you have selected and the appointment for the Work Center. This work center has been designated to be 'Last', therefore, you must select a time slot that falls before its time slot.

Corrective Procedure: Follow the corrective procedure described above.

10 OUTPROC HIERARCHY DIAGRAM

Menu or Screen Name	Executable
Master Menu	==> outproc_prg
1. Peacetime Menu	
1. Loss Report Menu	
1. View/Print ETS/ESA Report	
2. View/Print DLOS Report	
3. View/Print ETS/ESA Past Due Report	
4. View/Print DLOS Past Due Report	
2. SGLV-8286/DD-93 Family Member Processing	
1. Address Maintenance	
2. SGLV-8286 Processing	
3. DD-93 Processing (Comprehensive)	
4. DD-93 Processing (Associated Persons)	
5. Print SGLV-8286/DD-93	
1. Print SGLV-8286	
2. Print DD-93	
3. Print SGLV-8286/DD-93 Worksheet by SSN	
4. Print SGLV-8286/DD-93 Worksheet by Unit	
5. Print SGLV-8285	
6. Load Laser Fonts	
3. SIDPERS Transaction Menu	
1. Add a Soldier to Database (Arrival Transaction)	
2. Depart a Soldier (Departure Transaction)	
3. Revoke an Arrival Transaction	
4. Revoke a Departure Transaction	
5. Create TDR "N" Transaction	
6. Create "NX" Transaction	
7. Create "SEP" transaction	
8. Transaction Maintenance Menu	
1. View/Print SIDPERS Transaction Menu	
2. Delete SIDPERS Transaction Menu	
3. Free-Form	
4. SIDPERS Upload Transaction Menu	
1. Create Transaction Upload File Tape	
2. Send Upload Transaction File Electronic	
4. Out-Processing Control Center Menu	
1. Initialize OUTPROC Record	
2. Work Center Questionnaire	
3. Work Center Questionnance	
4. Delete Appointments Menu	
4. Delete Appointments Menu	
2. Delete Appointments by Individual	
5. Print Installation Clearance Report	
6. Hold Status Update Menu	
1. Place Soldier On/Off Hold	
2. Remove Soldier's Out-Processing records	
7. Work Center Clearance Status	
5. Administrative Report Menu	
1. Consolidated Clearance Report	
1. Consolidated Cicarance Report	
3. Out-Processing Personnel Report by Unit	
4. Out-Processing Statistics Report	
1. Out 1100033ing Statistics Report	

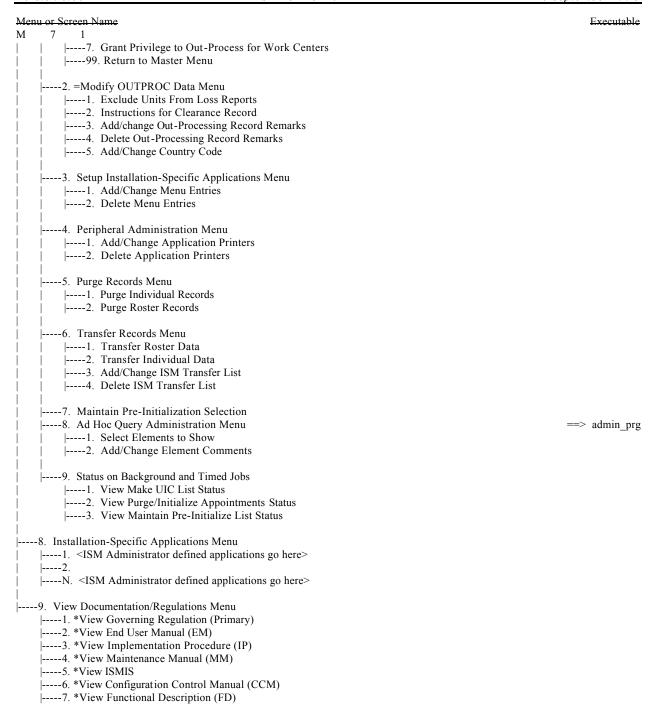
OUTPROC Hierarchy Diagram



OUTPROC Hierarchy Diagram – Continued.

```
Menu or Screen Name
                                                                                                                     Executable
      5 3
M
         |----3. Submit ECP/PR
         |----4. Telnet to STARS BBS
    |----4. ISM Data Sheet
|----6. Problem Reports/ECP-S Submission
     |----1. Add/Change ECP/PR
    |----2. Delete ECP/PR
     |----3. Submit ECP/PR
     |----4. Telnet to STARS BBS
         |----1. View Status of Problem Reports
              |----1. Application Software Standard Reports Menu
                   |----1. All Open ECP-S by DPI Code
                   |----2. All Closed ECP-S by DPI Code
                   |----3. All Canceled ECP-S by DPI Code
                   |----4. All Open PR by DPI Code
                   |----5. All Closed PR by DPI Code
                   |----6. All Canceled PR by DPI Code
              |----2. Executive Software Standard Reports Menu
                   |----1. All Open ECP-S by AIS Code
                        |----1. Executive Software Open ECP-S by specific AIS Code
                        |----2. Application Software Open ECP-S by specific AIS Code
                   |----2. All Closed ECP-S by AIS Code
                   |----3. All Canceled ECP-S by AIS Code
                   |----4. All Open PR by AIS Code
                   |----5. All Closed PR by AIS Code
                   |----6. All Canceled PR by AIS Code
          |----2. View Individual Problem Reports/ECP-S
              |----1. ISM Application Software
              |----2. Executive Software Baseline
          |----3. View Statistical/Analysis Reports
              |----1. ISM Application Software Statistical/Analysis Report Menu
              |----2. Executive Software Statistical/Analysis Report Menu
              |----3. Application Software Utilization Report
              |----4. Listing of User Accounts Not Initialized by the FA
              |----5. ISM Network Response Times
              |----6. Listing of ISM Functional Administrators
              |----7. Sun690 DASD Utilization Reports
          |----4. View Current Baseline Software Versions
              |----1. Application Software
              |----2. Executive Software
          |----5. View Testing Schedule
          |----6. View Software Fielding Schedule
          |----7. View ISM Points of Contact
          |----8. View News Bulletin Board
|----7. OUTPROC Initialization/Admin Menu
     |----1. Security Administration Menu
         |----1. Add/Change OUTPROC User
         |----2. Delete OUTPROC User
         |----3. Add Alternate Administrator
         |----4. Delete Alternate Administrator
         |----5. Grant Privilege to Add/Change Work Centers
         |----6. Grant Privilege to Delete Work Centers
```

OUTPROC Hierarchy Diagram - Continued.



OUTPROC Hierarchy Diagram.

11 OUTPROC DATABASE SCHEMA AND ATTRIBUTES

```
{ DATABASE outproc delimiter | }
grant dba to oracle;
grant dba to outproc;
grant dba to outprc1;
grant dba to outprc2;
{ TABLE "outproc".printer row size = 95 number of columns = 3 index size = 0 }
create table "outproc".printer
   description......char(60),
   printer_class......char(20).....not null
revoke all on "outproc".printer from "public";
{ TABLE "outproc".printer default row size = 59 number of columns = 4 index size = 27 }
create table "outproc".printer default
   printer name ......char(15) .....not null,
   form.....char(10)
revoke all on "outproc".printer default from "public";
create index "outproc".printer d idx on "outproc".printer default (username);
{ TABLE "outproc".prison_tbl row size = 17 number of columns = 3 index size = 19 }
create table "outproc".prison tbl
   ind ssn ......char(9) .....not null,
   pid ______not null,
   parole integer not null
revoke all on "outproc".prison tbl from "public";
create unique index "outproc".ix214 1 on "outproc".prison tbl (ind ssn);
{ TABLE "outproc".menu tbl row size = 140 number of columns = 2 index size = 111 }
create table "outproc".menu tbl
   revoke all on "outproc".menu tbl from "public";
create unique index "outproc".ix111 1 on "outproc".menu tbl (menu item);
{ TABLE "outproc".exclude units row size = 6 number of columns = 3 index size = 15 }
create table "outproc".exclude units
   un svc dsg cd......char(1).....not null,
   un porg dsg id......char(3).....not null,
   un descr dsg id ......char(2).....not null
revoke all on "outproc".exclude units from "public";
create unique index "outproc".ix159 1 on "outproc".exclude units (un svc dsg cd, un porg dsg id,
un descr dsg id);
{ TABLE "outproc".wc permissions row size = 35 number of columns = 3 index size = 27}
create table "outproc".wc permissions
   logname ......not null,
   permission ......char(1),
   workentr.....char(20)
   );
```

```
revoke all on "outproc".wc permissions from "public";
create index "outproc".ix147 1 on "outproc".wc permissions (logname);
{ TABLE "outproc".sysmenuitems row size = 143 number of columns = 5 index size = 39}
create table "outproc".sysmenuitems
   itemnum....integer,
   mtext ......char(60),
   mtype......char(1),
   progname ......char(60)
   );
revoke all on "outproc".sysmenuitems from "public";
create unique index "outproc".meniidx on "outproc".sysmenuitems (imenuname,itemnum);
{ TABLE "outproc".sysmenus row size = 78 number of columns = 2 index size = 33 }
create table "outproc".sysmenus
   menuname......char(18),
   title ......char(60)
revoke all on "outproc".sysmenus from "public";
create unique index "outproc".sysmenidx on "outproc".sysmenus (menuname);
{ TABLE "outproc".security row size = 78 number of columns = 3 index size = 12 }
create table "outproc".security
   user id .....not null,
   revoke all on "outproc".security from "public";
create index "outproc".ix181 2 on "outproc".security (user id);
{ TABLE "outproc".remarks row size = 64 number of columns = 2 index size = 12 }
create table "outproc".remarks
   remark key .....not null,
   revoke all on "outproc".remarks from "public";
create unique index "outproc".ix160 1 on "outproc".remarks (remark key);
{ TABLE "outproc".ind rmrks row size = 13 number of columns = 2 index size = 19 }
create index "outproc".ix161 1 on "outproc".ind rmrks (ind ssn);
{ TABLE "outproc".auth tbl row size = 42 number of columns = 3 index size = 27 }
create unique index "outproc".ix160 1 on "outproc".remarks (remark key);
{ TABLE "outproc".ind rmrks row size = 13 number of columns = 2 index size = 19 }
create table "outprocproc".ind rmrks
   ind_ssn ......char(9) .....not null,
   remark key ......not null
revoke all on "outproc".ind rmrks from "public";
create table "outproc".auth tbl
   fullname.....char(27),
   sys adm.....char(1)
   inf telephone nr.....char(28)
   );
revoke all on "outproc".auth tbl from "public";
create unique index "outproc".ix125 1 on "outproc".auth tbl (logname);
{ TABLE "outproc".outproc row size = 311 number of columns = 17 index size = 19 }
create table "outproc".outproc
```

```
start dt.....char(8),
   start tm.....char(4),
   unit name ......char(30),
   org addr city nm.....char(17),
   org addr ctry cd .....char(2),
   org addr forn nr.....char(9),
   org addr gtwy ab .....char(3),
   org adr state ab.....char(2),
   org addr zip cd.....char(9),
   depart reason.....char(13),
   req completion dt.....char(8),
   completion dt.....char(8),
   completion tm.....char(4),
   hold dt.....char(8),
   complete by nm.....char(27),
   comments tx.....char(150)
   orders no ......char(8)
   orders dt ......char(8)
   gaining unit .....char(31)
   departure dt.....char(8)
   travel cd......char(1)
   disposition......char(11)
   acap ......char(1)
   acap reason.....char(31)
revoke all on "outproc".outproc from "public";
create unique index "outproc".ix149 5 on "outproc".outproc (ind ssn);
{ TABLE "outproc".max id row size = 22 number of columns = 2 index size = 33 }
create table "outproc".max id
   maxid.....integer
revoke all on "outproc".max id from "public";
create unique index "outproc".ix115 1 on "outproc".max id (tabname);
{ TABLE "outproc".adhoc sydet row size = 122 number of columns = 8 index size = 0 }
create table "outproc".adhoc svdet
   (
   query id ______not null,
   data type.....integer,
   data text ......char(60),
   printorder.....integer,
   sort direct ......char(4),
   condition......char(11),
   and or......char(3)
revoke all on "outproc".adhoc sydet from "public";
{ TABLE "outproc".country row size = 40 number of columns = 2 index size = 72 }
create table "outproc".country
   country nm......char(38).....not null
revoke all on "outproc".country from "public";
create unique index "outproc".ix202 1 on "outproc".country (country cd);
create unique index "outproc".ix202_2 on "outproc".country (country nm);
```

```
{ TABLE "outproc".rosters row size = 143 number of columns = 11 index size = 21 }
create table "outproc".rosters
   mil outpre str dt.....char(8),
   mil outpre cmp dt.....char(8),
   orgu cm dp rsn cd.....char(14),
   org addr loc tx.....char(60),
   org addr gtwy ab .....char(3),
   org addr city nm.....char(17),
   org addr state ab.....char(2),
   org addr zip cd.....char(9),
   org addr entry ed.....char(2),
   org addr forn nr.....char(10)
revoke all on "outproc".rosters from "public";
create unique index "outproc".ix157 1 on "outproc".rosters (roster id);
{ TABLE "outproc".enrostered row size = 19 number of columns = 2 index size = 19 }
create table "outproc".enrostered
   revoke all on "outproc".enrostered from "public";
create unique index "outproc".ix158 2 on "outproc".enrostered (ind ssn);
{ TABLE "outproc".roster appt row size = 46 number of columns = 5 index size = 0 }
create table "outproc".roster appt
   org wc nm......ehar(20).....not null,
   org wc appt dt.....char(8),
   org we appt st tm.....char(4),
   org_wc_appt_end_tm.....char(4)
revoke all on "outproc".roster appt from "public";
{ TABLE "outproc".adhoc tbl row size = 192 number of columns = 13 index size = 21 }
create table "outproc".adhoc tbl
   owner......char(8),
   table name ......char(18),
   col name......char(18),
   col length smallint,
   col type smallint.
   has nulls .....char(1),
   dbpath ......char(60),
   show......char(1),
   key .....char(1),
   master.....char(1),
   comment1......char(50)
revoke all on "outproc".adhoc tbl from "public";
create unique index "outproc".ix155 1 on "outproc".adhoc tbl (adhoc id);
{ TABLE "outproc".adhoc sygry row size = 178 number of columns = 9 index size = 115}
create table "outproc".adhoc svqry
   user id ......char(8),
   query name.....char(30),
   query id.....integer,
```

```
save date ......char(10),
   comment1......char(60),
   comment2......char(60),
   sel type .....integer,
   adv query ......char(1),
   revoke all on "outproc".adhoc svqry from "public";
create unique index "outproc".ix117 2 on "outproc".adhoc svqry (query name);
create unique index "outproc".adhoc svidx on "outproc".adhoc svqry (query name,user id,show to all);
{ TABLE "outproc".ecps tbl row size = 3153 number of columns = 22 index size = 24 }
create table "outproc".ecps tbl
   origin ......char(12),
   rept type ......char(14) .....not null,
   send to ......char(28),
   sent from......char(25),
   attn......char(26),
   priority......char(9),
   app ver......char(20),
   prob date ......char(10) .....not null,
   prog_id.....char(66),
   prob title ......char(66),
   prob descr.....char(960),
   effect......char(420),
   rec sol......char(480),
   revoke all on "outproc".ecps tbl from "public";
create unique index "outproc".ix103 1 on "outproc".ecps tbl (origin);
grant all on "outproc".printer to "public" as "outproc";
grant all on "outproc".printer_default to "public" as "outproc";
grant all on "outproc".prison tbl to "public" as "outproc";
grant all on "outproc".menu tbl to "public" as "outproc";
grant all on "outproc".exclude units to "public" as "outproc";
grant all on "outproc".wc permissions to "public" as "outproc";
grant all on "outproc". sysmenuitems to "public" as "outproc";
grant all on "outproc".sysmenus to "public" as "outproc";
grant all on "outproc".security to "public" as "outproc";
grant all on "outproc".remarks to "public" as "outproc";
grant all on "outproc".ind rmrks to "public" as "outproc";
grant all on "outproc".auth tbl to "public" as "outproc";
grant all on "outproc".outproc to "public" as "outproc";
grant all on "outproc".max id to "public" as "outproc";
grant all on "outproc".adhoc svdet to "public" as "outproc";
grant all on "outproc".country to "public" as "outproc";
grant all on "outproc".adhoc svqry to "public" as "outproc";
grant all on "outproc".rosters to "public" as "outproc";
grant all on "outproc".enrostered to "public" as "outproc";
grant all on "outproc".roster_appt to "public" as "outproc";
grant all on "outproc".ecps_tbl to "public" as "outproc";
```

```
grant all on "outproc".adhoc tbl to "public" as "outproc";
create synonym "generic".printer for "outproc".printer;
create synonym "generic".printer default for "outproc".printer default;
create synonym "generic".adhoc tbl for "outproc".adhoc tbl;
create synonym "generic".adhoc svqry for "outproc".adhoc svqry;
create synonym "generic".adhoc svdet for "outproc".adhoc svdet;
create synonym "GENERIC".adhoc tbl for "outproc".adhoc tbl;
create synonym "GENERIC".adhoc_svqry for "outproc".adhoc_svqry;
create synonym "GENERIC".adhoc_svdet for "outproc".adhoc_svdet;
create synonym "generic".max id for "outproc".max id;
create synonym "generic".ecps tbl for "outproc".ecps tbl;
create synonym "inproc".printer for "outproc".printer;
create synonym "inproc".printer default for "outproc".printer default;
create synonym "inproc".prison tbl for "outproc".prison tbl;
create synonym "inproc".menu tbl for "outproc".menu tbl;
create synonym "inproc".exclude units for "outproc".exclude units;
create synonym "inproc".wc permissions for "outproc".wc permissions;
create synonym "inproc".security for "outproc".security;
create synonym "inproc".auth tbl for "outproc".auth tbl;
create synonym "inproc".outproc for "outproc".outproc;
create synonym "inproc".country for "outproc".country;
create synonym "outproc".i civilian for ilidb: "oracle".civilian;
create synonym "outproc".i cmd cd lookup for ilidb: "oracle".cmd cd lookup;
create synonym "outproc".i cmsnd occ spec for ilidb: "oracle".cmsnd occ spec;
create synonym "outproc".i cmsnd off for ilidb: "oracle".cmsnd off;
create synonym "outproc".i co aoc lookup for ilidb: "oracle".co aoc lookup;
create synonym "outproc".i_co_aoc_master for ilidb:"oracle".co aoc master;
create synonym "outproc".i enl mos lookup for ilidb: "oracle".enl mos lookup;
create synonym "outproc".i enl mos master for ilidb: "oracle".enl mos master;
create synonym "outproc".i enl occ spec for ilidb: "oracle".enl occ spec;
create synonym "outproc".i_enlisted for ilidb:"oracle".enlisted;
create synonym "outproc".i ind address for ilidb: "oracle".ind address;
create synonym "outproc".i ind appt for ilidb: "oracle".ind appt;
create synonym "outproc".i ind assoc for ilidb: "oracle".ind assoc;
create synonym "outproc".i ind assoc addr for ilidb: "oracle".ind assoc addr;
create synonym "outproc".i ind phone for ilidb: "oracle".ind phone;
create synonym "outproc".i individual for ilidb:"oracle".individual;
create synonym "outproc".i mil pers for ilidb: "oracle".mil pers;
create synonym "outproc".i mil pers asg for ilidb: "oracle".mil pers asg;
create synonym "outproc".i_mil_sfpa for ilidb:"oracle".mil_sfpa;
create synonym "outproc".i pers test for ilidb: "oracle".pers test;
create synonym "outproc".i unit for ilidb: "oracle".unit;
create synonym "outproc".i unit auth str for ilidb: "oracle".unit auth str;
create synonym "outproc".i unit phone for ilidb: "oracle".unit phone;
create synonym "outproc".i warr off for ilidb: "oracle".warr off;
create synonym "outproc".i wo mos lookup for ilidb:"oracle".wo mos lookup;
create synonym "outproc".i wo mos master for ilidb: "oracle".wo mos master;
create synonym "outproc".i wo occ spec for ilidb: "oracle".wo occ spec;
create synonym "outproc".i workcntr appt for ilidb: "oracle".workcntr appt;
create synonym "outproc".i workentr doc for ilidb:"oracle".workentr doc;
create synonym "outproc".i workentr gen inf for ilidb: "oracle".workentr gen inf;
create synonym "outproc".i workentr quest for ilidb: "oracle".workentr quest;
create synonym "outproc".i workentr skel for ilidb: "oracle".workentr skel;
create synonym "inproc".i_civilian for ilidb:"oracle".civilian;
create synonym "inproc".i cmd cd lookup for ilidb: "oracle".cmd cd lookup;
create synonym "inproc".i cmsnd occ spec for ilidb: "oracle".cmsnd occ spec;
create synonym "inproc".i cmsnd off for ilidb: "oracle".cmsnd off;
create synonym "inproc".i co aoc lookup for ilidb: "oracle".co aoc lookup;
create synonym "inproc".i co aoc master for ilidb: "oracle".co aoc master;
```

```
create synonym "inproc".i enl mos lookup for ilidb: "oracle".enl mos lookup;
create synonym "inproc".i enl mos master for ilidb: "oracle".enl mos master;
create synonym "inproc".i enl occ spec for ilidb: "oracle".enl occ spec;
create synonym "inproc".i enlisted for ilidb: "oracle".enlisted;
create synonym "inproc".i ind address for ilidb: "oracle".ind address;
create synonym "inproc".i ind appt for ilidb: "oracle".ind appt;
create synonym "inproc".i ind assoc for ilidb: "oracle".ind assoc;
create synonym "inproc".i ind assoc addr for ilidb: "oracle".ind assoc addr;
create synonym "inproc".i ind phone for ilidb:"oracle".ind phone;
create synonym "inproc".i individual for ilidb: "oracle".individual;
create synonym "inproc".i mil pers for ilidb: "oracle".mil pers;
create synonym "inproc".i mil pers asg for ilidb: "oracle".mil pers asg;
create synonym "inproc".i mil sfpa for ilidb: "oracle".mil sfpa;
create synonym "inproc".i_pers_test for ilidb:"oracle".pers_test;
create synonym "inproc".i unit for ilidb: "oracle".unit;
create synonym "inproc".i unit auth str for ilidb: "oracle".unit auth str;
create synonym "inproc".i unit phone for ilidb: "oracle".unit phone;
create synonym "inproc".i_warr_off for ilidb:"oracle".warr_off;
create synonym "inproc".i wo mos lookup for ilidb: "oracle".wo mos lookup;
create synonym "inproc".i wo mos master for ilidb: "oracle".wo mos master;
create synonym "inproc".i wo occ spec for ilidb: "oracle".wo occ spec;
create synonym "inproc".i workentr doc for ilidb: "oracle".workentr doc;
create synonym "inproc".i workentr gen inf for ilidb: "oracle".workentr gen inf,
create synonym "inproc".i workentr quest for ilidb: "oracle".workentr quest;
create synonym "inproc".i workentr skel for ilidb: "oracle".workentr skel;
create synonym "inproc".i workentr appt for ilidb: "oracle".workentr appt;
```

12 DATA DICTIONARY

Explanation of Report Format

NOTE: All information in this report, except RANGE, REQ and DESCRIPTION, is derived from the database schema.

MNEMONIC: The first line in each grouping consists of the database name followed by the table name. Subsequent lines consist of data elements listed within that table in the order they occur in the schema.

TYP: Type of data element:

B Bit String or Binary Data

C Character
D Decimal
F Floating Point
I Integer
S Small Integer

LEN: Length of element (bytes)

NUL: NULLs allowed:

field may have a NULL value
 N field must have a non NULL value

REQ: Indicates whether the value in a field is required in order to add the record:

value is not required

C value is required according to conditions stated in DESCRIPTION

R value is required

KEY: Type of key:

D element is indexed with duplicates allowed

U record is uniquely identified by a key (Components of the key are identified below by number).

LVL: This identifies the order of the components in the index: Range is 1 (highest level order) thru 16 (lowest level order)

RANGE: Range of allowed values of data element. This information should be derived from the Functional Description.

MNEMONIC	TYP	LEN	NUL	REQ	KEY	LVL	RANGE	DESCRIPTION	
adhoc svdet									
query id	I	4	N	R	D		Numeric	Query number located in adhoc svgry	
data_type	I	4					Numeric	Indicates placement in the SQL statement. (See	
:3F								notes)	
Notes:- 1=COLUMNS	, 2=F	ROM,	3= W	HERE,	4= S	ORT,	5= USER_WHERE	E, 99= advanced query.	
data_text	С	60					Free form or alias	Either the Basic Query fields or the Advanced Query Line	
printorder	I	4					Numeric	Queue order for printing	
sort_direct	С	4					ASC or DESC	Sort direction; how sort is listed - ASC= ascending DESC= descending	
condition	С	11					Relational operator	Operators available: =, <>, >=, <=, <, >, LIKE, NOT LIKE	
value	C	32					Free form	Value used to compare in where clause	
and_or	C	3					AND or OR	Where clause statement connector	
adhoc_svqry									
user_id	C	8			U	2	Free form	User identification; login name	
query_name	C	30			U	1	Free form	Name of saved query	
query_id	I	4					Numeric.	Query identification; unique I.D. number	
save_date	C	8					YYYYMMDD	Date that query was made	
comment1	C	60					Alphanumeric.	Comment 1 associated with the query.	
comment2	C	60					Alphanumeric.	Comment 2 associated with the query.	
sel_type	I	4					1, 2, or 3	Selection Type. 1=SELECT ALL, 2=SELECT UNIQUE, 3="SELECT COUNT"	
adv_query	C	1					Y or N.	Advanced Query.	
show_to_all	С	1			U	3	Y or N.	Show indicator.	
adhoc_tbl									
adhoc_id	С	10	N	R	U	*	Alphanumeric.	Ad Hoc id number	
owner	С	8					Alphanumeric	database owner	
table_name	С	18					Alphanumeric	Table Name	
col_name	С	18					Alphanumeric	Column Name	
col_length	I	2					Numeric	Column Length	
col_type	I	2					Numeric	Column Type	
has_nulls	С	1					Alphanumeric	Key field indicating, if null values are allowed.	
dbpath	С	60					Alphanumeric	Database path; full column name example: "owner".table.column	
alias	С	20					Alphanumeric	Alias name	
show	С	1					Alphanumeric	Show indicator	
key	С	1					Alphanumeric	Key field indicator code	
master	С	1					Alphanumeric		
comment1	С	50					Alphanumeric	Comment 1	

MNEMONIC	ТҮР	LEN	NIII	REQ	KEV	LVL	RANGE	DESCRIPTION
	111	LILITY	NOL	REQ	KEI	LVL	KANGE	DESCRIPTION
logname	С	14	N	R	U		Alphanumeric	User system login name
fullname	С	27	Y	R	U			User's full name
							Alphanumeric	
sys_adm	С	1	N	R			Y or N	System administrator
cmsnd_occ_spec	С	9	N				A lash amana ani a	Individual SSN
ind_ssn	С						Alphanumeric	
occ_spc_desig_cd		1	N				Alphanumeric	Occupation specialty designator code
cmsnd_off_aoc_id	С	3					Alphanumeric	Commissioned officer AOC id
com_off_skill_cd	С	2					Alphanumeric	Commissioned officer skill code
country			I					
country_cd	С	2	N		U		Alphabetic	Country code
country_nm	C	38	N		U		Alphabetic	Country name
ecps_tbl			ı					
origin	С	13	Y				Alphanumeric, cannot be blank	Originator Number
rept_type	С	14	N				Alphanumeric	Report Type
send_to	C	28	Y				Alphanumeric	Send to Address
sent_from	С	25	Y				Alphanumeric	Sent from Address
attn	С	26	Y				Alphanumeric	Attention Line
sent_from2	С	25	Y				Alphanumeric	Sent from Address Line 2
poc	С	20	Y				Alphanumeric	Point of Contact
phone	С	13	Y				Alphanumeric	Telephone Number
title	С	20	Y				Alphanumeric	Title of Problem
priority	С	9	Y				Alphanumeric, cannot be blank	Priority of Problem
app_ver	С	20	Y				Alphanumeric	Application Version Number
baseline	С	20	Y				Alphanumeric	Base Line Number
prob_date	С	10	N				Alphanumeric	Problem Report Date
prog_id	C	66	Y				Alphanumeric	Program Identification
prob_title	C	66	Y				Alphanumeric	Problem Title
prob_descr	С	600	Y				Alphanumeric	Problem Description
effect	С	120	Y				Alphanumeric	Effect to User
rec_sol	С	120	Y				Alphanumeric	Recommended Solution
remarks	С	900	Y				Alphanumeric	Remarks
ecps_date	С	10	N				YYYYMMDD	ECP-S date
user_id	С	8	N				Alphanumeric	User Identification
submit	С	1	N				Y or N, cannot be blank	Submitted for remedy
enl_occ_spec								
ind ssn	С	9	N	3			Alphanumeric	Individual SSN
occ_spc_desig_cd	С	1	N	3			Alphanumeric	Occupation specialty designator code

MNEMONIC	TYP	LEN	NUL	REQ	KEY	LVL	RANGE	DESCRIPTION
enl_mos_id	С	3					Alphanumeric	Enlisted MOS id
enl_skl_lvl_nr	С	1					Alphanumeric	Enlisted Skill Level Number
enl_sqi_cd	С	1					Alphanumeric	Enlisted SQI code
enl_asi_cd	С	2					Alphanumeric	Enlisted ASI code
enrostered								
roster_id	С	10					Alphanumeric	Roster identification
ind_ssn	С	9			U		Alphanumeric	Individual SSN
excluded_ranks								
army_mil_rank_ab	С	3			U		Alphanumeric	Army military rank abbreviation
ind_appt								
ind_ssn	С	9	N	3			Alphanumeric	Individual SSN
org_wc_nm	С	20	N	3			Alphanumeric	Organization work center name
org_wc_appt_dt	С	8					YYYYMMDD	Organization work center appointment date
org_wc_appt_tm	С	4					ННММ	Organization work center appointment time
auth_ind_nm	С	27					Alphabetic	Authorized individual name
org_wc_cmp_dt	С	8					YYYYMMDD	Organization work center completion date
org_wc_cmp_tm	С	4					ННММ	Organization work center completion time
org_wc_in_out_cd	С	1	3				Alphanumeric	Organization work center In-processing/Out- Processing code
org_wc_commnt_t	С	150					Free form	Organization work center comments text
ind_rmrks								
ind_ssn	С	9	N		D		Alphanumeric	Individual SSN
remark_key	I	4	N				Numeric	Remarks key
individual								
ind_ssn	С	9	N	4			Alphanumeric	Individual SSN
indiv_name	С	27					Alphabetic	Individual name
un_svc_dsg_cd	С	1					Alphanumeric	Unit service designator code
un_porg_dsg_id	С	3					Alphanumeric	Unit parent organization designator id
un_descr_dsg_id	С	2						Unit descriptive designator id
org_id	С	6					Alphanumeric	Organization id
birth_dt	С	8					YYYYMMDD	Birth date
ind_usctz_sta_cd	С	1					Alphanumeric	Individual US citizenship status code
ind_hiv_tst_ymdt	С	6					YYMMDD	Individual HIV test year-month-date
ind_race_pop_cd	С	1					Alphanumeric	Individual race population code
ind_sex_code	С	1					M or F	Individual gender code
civ_educ_lv_cd	С	1					Alphanumeric Civilian education level code	
ind_martl_st_cd	С	1					Alphanumeric Individual marital status code	
pri_lang_cd	С	2					Alphanumeric Primary language code	
sec_lang_cd	С	2					Alphanumeric	Secondary language code

MNEMONIC	TYP	LEN	NUL	REQ	KEY	LVL	RANGE	DESCRIPTION	
ind_vssn_cd	С	1					Alphanumeric	Individual SSN verification code	
pers_si_comp_cd	С	1					Alphanumeric	Personal security investigation completion code	
pers_si_comp_dt	С	8					YYYYMMDD	Personal security investigation completion date	
pers_si_init_cd	С	1					Alphanumeric	Personal security investigation initiated code	
pers_si_init_dt	С	8					YYYYMMDD	Personal security investigation initiated date	
ind_birth_sta_cd	C	2					Alphabetic	Individual birth state code	
ind_brth_city_nm	C	17					Alphanumeric	Individual birth city name	
ind_brth_ctry_cd	С	2					Alphabetic	Individual birth country code	
ind_ctzp_ctry_cd	С	2					Alphanumeric	Individual citizenship country code	
ind_ctzsp_org_cd	С	1					Alphanumeric	Individual citizenship organization code	
ind_ethnic_cd	С	1					Alphanumeric	Individual ethnic code	
max_id									
tabname	C	18	N	-	-		Alphanumeric	legal table name	
maxid	I	4	N	-	-		Number	last row number of table	
menu_tbl									
menu_item	С	70	N	-	-		Free Form	description of what command does	
command_line	С	70	N	-	-		Free Form	UNIX system command	
mil_pers									
ind_ssn	С	9	N	4	-	-	Alphanumeric	Individual SSN	
ar_ml_rnk_eff_dt	C	8	-	-	-	-	YYYYMMDD	Army military rank effective date	
army_mil_rank_ab	С	3	-	-	1	-	Alphanumeric	Army military rank abbreviation	
army_mil_rank_cd	C	2	-	-	-	-	Alphanumeric	Army military rank code	
army_mil_rank_dt	С	8	-	-	-	-	YYYYMMDD	Army military rank date	
asg_arr_dt	С	8	-	-	-		YYYYMMDD	Assignment arrival date	
asg_deros_dt	С	8	-	-	-	-	YYYYMMDD	Overseas assignment date	
asg_dprt_dt	С	8	-	-	-	-	YYYYMMDD	Assignment departure date	
asg_dlos_dt	С	8	-	-	-	-	YYYYMMDD	Assignment dlos date	
asg_proj_arr_dt	С	8	-	-	-	-	YYYYMMDD	Assignment project arrival date	
asg_dros_dt	С	8	-	-	-	-	YYYYMMDD	Assignment departure overseas date	
basd	С	8	-	-	-	-	YYYYMMDD	Military basic active date	
bped	С	8	-	-	-	-	YYYYMMDD	Basic pay entry date	
mil_ad_ent_cy_nm	С	17	-	-	-	-	Alphabetic	Military active duty entry city name	
mil_ad_ent_st_cd	С	2	-	-	-	-	Alphanumeric	Military active duty entry state code	
mil_dy_stat_ab	С	3	-	-	-	-	Alphanumeric	Military duty state abbreviation	
mil_ead_dt	С	8	-	-	-	-	YYYYMMDD	Military entry active duty date	
mil_educ_lvl_cd	С	1	-	-	-	-	Alphanumeric	Military education level code	
mil_pers_clas_cd	С	1	-	-	-	-	Alphanumeric	Military personnel class code	
mil_phypr_dylm_c d	С	1	-	-	-	-	Alphanumeric	Military physical profile duty limitation code	

MNEMONIC	TYP	LEN	NUL	REQ	KEY	LVL	RANGE	DESCRIPTION	
mil_sqt_score_qy	С	3	-	-	-	-	Alphanumeric	Military skill qualification test score quantity	
mil_svc_comp_cd	С	1	-	-	-	1	Alphanumeric	Military service completion date	
mil_pulhes	С	6	-	-	-	1	Alphanumeric	Military PULHES code	
prom_indic_cd	С	1	-	-	-	ı	Alphanumeric	Promotion indicator code	
mil_rec_stat_cd	С	1	-	-	-	-	Alphanumeric	Military recruitment status code	
mil_attached_cd	С	1	-	-	-	-	Alphanumeric	Military attached indicator code	
mil_asg_posn_nr	С	4	-	-	-		Alphanumeric	Military assigned position indicator	
mil_delay_sep_cd	С	1	-	-	-	-	Alphanumeric	Military delay separator code	
mil_svc_agree_cd	С	1		-	-	-	Alphanumeric	Military service agreement code	
mil_photo_sus_dt	С	6	-	-	-	-	YYMMDD	Military photo suspense date	
mil_last_pcs_dt	С	6	-	-	-	-	YYMMDD	Military date of last permanent change of station date	
afrm_award_el_dt	С	6	-	-	-	-	YYMMDD	Date eligible for Armed Forces Reserve Medal award date	
ind_veap_stat_cd	С	1	-				Alphanumeric	Individual veap status code	
outproc									
ind_ssn	С	9	N		U	1	Alphanumeric	Individual SSN	
start_dt	С	8					YYYYMMDD	Start date	
start_tm	С	4					ННММ	Start time	
unit_name	С	30					Free Form	Unit name	
org_addr_city_nm	С	17					Alphanumeric	New duty city	
org_addr_ctry_cd	С	2					Alphanumeric	Organizational address country code	
org_addr_forn_nr	С	9					Alphanumeric	New duty foreign postal number	
org_addr_gtwy_ab	С	3					Alphanumeric	New duty gateway postal abbreviation	
org_adr_state_ab	С	2					Alphanumeric	New duty state code	
org_addr_zip_cd	С	9					Alphanumeric	New duty zip code	
depart_reason	С	13					Free form	Reason of departure	
req_completion_dt	С	8					YYYYMMDD	Required completion date	
completion_dt	С	8					YYYYMMDD	Out-Processing completion date	
completion_tm	С	4					ННММ	Out-Processing completion time	
hold_dt	С	8					YYYYMMDD	Out-Processing hold Date	
complete_by_nm	С	27					Free form	Person completed by name	
comments_tx	С	150					Free form	Comment Text	
orders_no	С	8					Alphanumeric		
orders_dt	С	8	_				YYYYMMDD	Orders date	
losing_unit	С	31					Alphanumeric	Losing unit	
gaining_unit	С	31					Alphanumeric		
departure_dt	С	8					YYYYMMDD	Departure date	

MNEMONIC	ТҮР	LEN	NUL	REQ	KEY	LVL	RANGE	DESCRIPTION	
travel_cd	С	1					Alphanumeric	Travel code	
disposition	С	11					Alphanumeric	Disposition	
acap	С	1					Alphanumeric	ACAP	
acap reason	С	31					Alphanumeric	ACAP reason	
printer		31					ruphanameric	Tiern Teason	
device name	С	15	_	_	_	_	submenu only	name of printer	
description	С	60	_	-	_	-	Free Form	description of the available printer	
printer_class	С	20	-	-	-	-	submenu only	printer class option	
entyid	С	14	-	-	-		Alphanumeric	id of person entering data	
entydate	С	10	-	-	_		MM/DD/YYYY	entry date	
printer_default									
username	С	14	N	-	-		login name	valid user name	
printer_class	С	20	N	-	-		Free Form	printer class options	
printer_name	С	15	N	-	-		Alphanumeric	printer name	
form	С	10	-	-	-		form name	associated form name	
prison_tbl									
ind_ssn	С	9	N	U	1		Alphanumeric	Individual SSN	
pid	I	22	N				Numeric	Process ID	
parole	I	22	N				Numeric	Parole	
remarks									
remark_key	I	22	N		U		Numeric	Remarks ID	
remarks	С	60					Free form	Remarks text	
roster_appt									
roster_id	С	10	N				Alphanumeric	Roster identification	
org_wc_nm	С	20	N				Alphanumeric	Organization work center name	
org_wc_appt_dt	С	8					YYYYMMDD	Organization work center appointment date	
org_wc_appt_st_t m	С	4					ННММ	Organization work center appointment starting time	
org_wc_appt_end_t m	С	4					ННММ	Organization work center appointment end time	
rosters									
roster_id	C	10	N		U		Alphanumeric	Roster identification	
mil_inprc_str_dt	C	8					YYYYMMDD	Military in-processing start date	
mil_inprc_cmp_dt	С	8					YYYYMMDD	Military in-process completion date	
security									
logname	С	14	N		R		Login	The login name of the user	
user_id	I	22	N	С	D		Numeric	Field 3 of etc/passwd	
item	С	60	N	С			Field Label	Only the field labels found on the security form can be saved	
sysmenuitems									

MNEMONIC	TYP	LEN	NUL	REQ	KEY	LVL	RANGE	DESCRIPTION	
imenuname	С	18			U	1	Alphanumeric	Item menu name	
itemnum	I	22			U	2	Numeric	Item number	
mtext	С	60					Free form	Menu text	
mtype	С	1					Alphanumeric	Menu type	
progname	С	60					Free form	Program name	
sysmenus									
menuname	С	18			U		Alphanumeric	Menu name	
title	С	60					Alphanumeric	Menu title	
wc_permissions									
logname	С	14			D		Alphanumeric	Login Name	
permission	С	1					Y or N	Permission	
workentr	С	20					Alphanumeric	Work center	
wo_occ_spec									
ind_ssn	С	9	N	3			Alphanumeric	Individual SSN	
occ_spc_desig_cd	С	1	N	3			Alphanumeric	Occupational specialty designator code	
wo_mos_id	С	4					Alphanumeric	Warrant Officer MOS id	
wo_sqi_cd	С	1					Alphanumeric	Warrant Officer SQI code	
workentr_appt									
org_wc_nm	С	20	N	3			Free form	Organization work center name	
org_wc_appt_dt	С	8	N	3			YYYYMMDD	Organization work center appointment date	
org_wc_appt_tm	С	4	N	3			ННММ	Organization work center appointment time	
org_wc_apt_us_nr	I	4					Numeric	Organization work center appointment used number	
workentr_doc									
org_wc_nm	С	20	N	2			Free form	Organization work center name	
org_wc_doc_nm	С	40					Free form	Organization work center document name	
org_wc_doc_pr_cd	С	1					Alphanumeric	Organization work center document presence code	
workentr gen in f									
org_wc_nm	С	20	N	4			Free form	Organization work center name	
org_wc_apt_rq_cd	С	1					Alphanumeric	Organization work center appointment required code	
org_wc_apt_dr_mn	I	4					MMMM	Organization work center appointment duration in minutes	
org_addr_loc_tx	С	20					Free form	Organization address location text	
org_wc_ip_pr_nr	С	3					Alphanumeric	Organization work center In-Processing priority number	
instl_nm	С	25					Free form	Installation name	
org_wc_prc_rq_cd	С	1					Alphanumeric	Organization work center processing required code	
org_wc_offhrs_tx	С	100					Free form	Organization work center office hours text	

MNEMONIC	ТҮР	LEN	NUL	REQ	KEY	LVL	RANGE	DESCRIPTION
un_office_sym	С	16					Alphanumeric	Unit office symbol
org_wc_ola_cd	С	1					Alphanumeric	Organization work center on-line access code
org_wc_op_pr_nr	С	3					Alphanumeric	Organization work center Out-Processing priority number
org_wc_sch_cd	С	1					Alphanumeric	Organization work center scheduling code
inf_telephone_nr	C	28					Alphanumeric	Organization work center telephone number
workcntr_quest								
org_wc_nm	C	20	N	2			Free form	Organization work center name
org_wc_disp_cd	C	3					Alphanumeric	Organization work center display code
org_wc_quest_tx	С	100					Free form	Organization work center question text
org_wc_qu_ty_cd	С	1					Alphanumeric	Organization work center question type code
workcntr_skel								
org_wc_nm	С	20	N	3			Free form	Organization work center name
weekday_cd	I	4	N	3			Numeric	Week day code
org_wc_apt_st_tm	С	4	N	3			ННММ	Organization work center appointment start time
org_wc_apt_cp_nr	I	4					Numeric	Organization work center appointment capacity number
weekday_nm	C	3					Alphabetic	Weekday name

13 CROSS REFERENCE TABLE

Explanation of Report Format

NOTE: All information in this report, except RANGE, REQ and DESCRIPTION, is derived from the

appropriate schemas.

MNEMONIC: Column name of data element. Data elements are listed here in alphabetical order by mnemonic

name, table name and database name.

TYP: Type of Data Element

B Bit String or Binary Data

C Character
D Decimal
F Floating Point
I Integer
S Small Integer

LEN: Length of Element (Characters)

NUL: NULLs Allowed:

field may have a NULL value
 field must have a non NULL value

IDX: The highest applicable of the following is shown.

Element is not indexed

1 Element is a component of an index key with duplicates allowed

2 Element is an index key with duplicates allowed 3 Element is a component of an unique index key

4 Element is a unique index key

DB: Database that contains data element. This field is suppressed and replaced with a '-' if either the

element name and database of this element are the same as the previous element or if the database

and table of the element are the same as the previous element.

TABLE: Database table that contains data element. This field is suppressed and replaced with a '-' if the

table and database of this element is the same as the previous element.

RANGE: Range of allowed values of data element. This information should be derived from the Functional

Description.

MNEMONIC	ТҮР	LEN	NUL	IDX	DB	TABLE	RANGE	DESCRIPTION
adhoc_id	С	10	N	ı	outpro c	adhoc_tbl	Text Number	adhoc id number
adv_query	С	1	i	1	outpro c	adhoc_svqry	Y or N	Y = advanced query, N = basic query
afrm_award_el_dt	С	6	1		ilidb	mil_pers	YYMMDD	Date eligible for Armed Forces Reserve Medal
alias	С	30	-	-	outpro c	adhoc_tbl	Free Form	alias name
and_or	С	3	-	-	outpro c	adhoc_svdet	AND or OR	where clause statement connector
app_ver	С	20			outpro c	ecps_tbl	alphanumeric	Application version number
ar_ml_rnk_eff_dt	С	8	-		ilidb	mil_pers	YYYYMMDD	Army Military Rank effective date
army_mil_rank_ab	С	3	-	-	-		Alphanumeric	Army Military Rank abbreviation
army_mil_rank_cd	С	2	-		ilidb	mil_pers	alphanumeric	Army Military Rank Code
army_mil_rank_dt	C	8	-		ilidb	mil_pers	YYYYMMDD	Army Military Rank Date
arvdat	С	10	1	-	outpro c	demobloc	yyyy/mm/dd	Installation Arrival Date
arvdat	C	10	-	-	-	locator_tbl	yyyy/mm/dd	Arrival Date
asg_arr_dt	C	8	-	-	-		YYYYMMDD	Assignment Arrival Date
asg_deros_dt	С	8	ı	-	-		YYYYMMDD	Overseas Assignment deros date
asg_dlos_dt	C	8	-	-			YYYYMMDD	Anticipated Date of Loss
asg_dprt_dt	C	8	-	-	-		YYYYMMDD	Assignment Departure date
asg_dros_dt	С	8	-	-	-		YYYYMMDD	Overseas Assignment dros date
asg_proj_arr_dt	С	8	-	-	-		YYYYMMDD	Assignment Projected arrival date
attn	С	26	-		outpro c	ecps_tbl	Alphanumeric	Attention
basd	С	8	-		ilidb	mil_pers	YYYYMMDD	Military Basic Active duty date
baseline	С	20			outpro c	ecps_tbl	Alphanumeric	Base line
billet	С	50	ı	-	outpro c	demobloc	Free Form	Host Unit or Activity
birth_dt	C	8	-		ilidb	individual	YYYYMMDD	Birth Date
boxno	С	5	-	-	outpro c	locator_tbl	Free Form	Box Number
bped	C	8	-	-	ilidb	mil_pers	YYYYMMDD	Basic Pay Entry Date
civ_educ_lv_cd	С	1	1		ilidb	individual	Alphanumeric	Civilian Education Level code
civ_empl_step_nr	С	2	-		ilidb	civilian	Alphanumeric	Civilian Employment step number
civ_mil_rt_cd	C	1	-				Alphanumeric	Civilian Military Return code

MNEMONIC	ТҮР	LEN	NUL	IDX	DB	TABLE	RANGE	DESCRIPTION
civ_occ_ser_nr	С	5	-	-	-		Alphanumeric	Civilian Occupational service number
civ_pay_plan_cd	С	2	-	-	-		Alphanumeric	Civilian Pay Plan code
civ_py_gr_lvl_nr	С	2	-	-	-		Alphanumeric	Civilian Pay Grade level number
civ_rt_prg_cd	С	1	-	-	-		Alphanumeric	Civilian Return Program code
civ_rt_sc_dt	С	8	-	-	-		YYYYMMDD	Civilian Return to service date
cmsnd_off_aoc_id	С	3	-		ilidb	cmsnd_occ_spe	Alphanumeric	Commissioned Officer AOC id
co_cr_mgmt_cntl_	С	2	-		ilidb	cmsnd_off	Alphanumeric	Commissioned Officer career management control code
col_length	I	2	-	-	outpro c	adhoc_tbl	Number	column length
col_name	С	18	-	-	1	1	Alphanumeric	legal column name
col_type	I	2	-	-	1		Number	0 = char and 2 = integer
com_off_skill_cd	С	2	-		ilidb	cmsnd_occ_spe	Alphanumeric	Commissioned Officer Skill Code
command_line	С	70	N	-	outpro c	menu_tbl	Free Form	UNIX system command
commander	С	27	-	-	outpro c	Demobloc	Free Form	Unit Commander
comment1	С	60	-	-	outpro c	adhoc_svqry	Free Form	comments describing use
comment1	С	30	-	-	-	adhoc_tbl	Free Form	comments describing use
comment2	С	60	-	-	outpro c	adhoc_svqry	Free Form	Comments describing use
condition	С	10	-	-	outpro c	adhoc_svdet	Relational Operators	Operator available: <, >, LIKE, NOT LIKE =, <>, >=, <=,
cutoff	С	10	-	-	outpro c	locator_tbl	yyyy/mm/dd	Cutoff
data_text	С	60	-	-	outpro c	adhoc_svdet	Free Form or alias	text
data_type	I	4	-	-	-	-	Number	The following values indicate placement in the SQL statement. (See notes)
date1	С	10	-	-	outpro c	locator_tbl	yyyy/mm/dd	Purge Date
dbpath	С	60	-	-	outpro c	adhoc_tbl	full column name	example: "own- er".table.column
depaddrlin1	С	60	-	-	outpro c	demobloc	Free Form	Depart Address Line 1
depaddrlin2	С	33	-	-	-	-	Free Form	Depart Address Line 2
depzipcd	С	9	-	-			Text Number	Depart Zip Code
description	С	60	-	-	outpro c	printer	Free Form	description of the available printer
device_name	С	15	-	-	1	-	Sub menu only	name of printer

MNEMONIC	ТҮР	LEN	NUL	IDX	DB	TABLE	RANGE	DESCRIPTION
dptdat	С	10	-	1	outpro c	demobloc	YYYY/MM/DD	Installation Departure Date
dptdat	С	10	-	-	ı	locator_tbl	YYYY/MM/DD	Depart Date
ecps_date	С	10	-		outpro c	ecps_tbl	YYYY/MM/DD	ECP-S date
effect	С	420	-	-	outpro c	ecps_tbl	Alphanumeric	Effect on user
enl_asi_cd	С	2	-		ilidb	enl_occ_spec	Alphanumeric	Enlisted ASI code
enl_mos_id	С	3	-	-		enl_occ_spec	Alphanumeric	Enlisted MOS id
enl_skl_lvl_nr	С	1	-	-		enl_occ_spec	Alphanumeric	Enlisted Skill Level number
enl_sqi_cd	С	1	-	-		enl_occ_spec	alphanumeric	Enlisted SQI code
entydate	С	10	-	-	outpro c	demobloc	yyyy/mm/dd	Entry Date
entydate	С	10	-	-	-	locator_tbl	yyyy/mm/dd	Entry Date
entydate	С	10	-	-	-	printer	MM/DD/YYYY	Entry date
entydate	С	10	-	-	-	security	not used	not used
entyid	С	14	-	-	outpro c	demobloc	Free Form	Entry ID
entyid	С	14	-	-	-	locator_tbl	Free Form	Entry ID
entyid	С	14	-	-	1	printer	Alphanumeric	id of person entering data
entyid	С	14	-	-	-	security	not used	not used
escaddrlin1	С	60	-	1	outpro c	demobloc	Free Form	Escort Address Line 1
escaddrlin2	С	33	-	-			Free Form	Escort Address Line 2
escort	С	27	-	-	1	-	Free Form	Installation Escort Name
esczipcd	С	9	-	-	-	-	Text Number	Escort Zip Code
flag	С	1	-	-	outpro c	security	not used	not used
form	С	10	-	-		printer_default	form name	associated form name
fullname	С	27	-	-	outpro c	locator_tbl	Last First I.	Full Name
hqissorder	С	41	-	-	-	-	Free Form	HQ Issue Order
ind_addr_city_nm	С	17	-		ilidb	ind_address	Alphanumeric	Individual Address City Name
ind_addr_ctry_cd	С	2	-		ilidb	ind_address	Alphanumeric	Individual Address Country code
ind_addr_forn_nr	С	10	-		ilidb	ind_address	Alphanumeric	Individual Address Foreign number
ind_addr_gtwy_ab	С	3	-		ilidb	ind_address	Alphanumeric	Ind. Address Gateway abbreviation
ind_addr_loc_tx	С	60	-		ilidb	ind_address	Free form	Individual Address Location text
ind_addr_type_cd	С	1	N		ilidb	ind_address	Alphanumeric	Individual Address Type code
ind_addr_zip_cd	С	9	-	-			Alphanumeric	Individual Address Zip Code
ind_adr_state_ab	С	2	-		ilidb	ind_address	Alphanumeric	Individual Address State abbreviation

MNEMONIC	ТҮР	LEN	NUL	IDX	DB	TABLE	RANGE	DESCRIPTION
ind_hiv_tst_ymdt	С	6	-		ilidb	individual	YYMMDD	Individual HIV Test Year-Month-Date
ind_martl_st_cd	С	1	-		ilidb	individual	Alphabetic	Individual Marital Status Code
ind_race_pop_cd	С	1	-		ilidb	individual	Alphanumeric	Individual Race Population code
ind_sex_code	С	1	-	-		individual	M or F	Individual Gender Code
ind_ssn	С	9	N	4	ilidb	civilian	Alphanumeric	Individual SSN
ind_ssn	С	9	N	3	-	cmsnd_occ_spe	Alphanumeric	Individual SSN
ind_ssn	С	9	N	4	-	cmsnd_off	Alphanumeric	Individual SSN
ind_ssn	С	9	N	3	ilidb	enl_occ_spec	Alphanumeric	Individual SSN
ind_ssn	С	9	N	4	-	enlisted	Alphanumeric	Individual SSN
ind_ssn	С	9	N	2	-	ind_address	Alphanumeric	Individual SSN
ind_ssn	С	9	N	4	-	individual	Alphanumeric	Individual SSN
ind_ssn	С	9	N	4	ilidb	mil_pers	Alphanumeric	Individual SSN
ind_ssn	С	9	N	4	ilidb	warr_off	Alphanumeric	Individual SSN
ind_ssn	С	9	N	3		wo_occ_spec	Alphanumeric	Individual SSN
ind_usctz_sta_cd	С	1	-			individual	Alphanumeric	Individual US citizenship status code
ind_vssn_cd	С	1	-	-	-		alphanumeric	Individual SSN verified code
indiv_name	С	27	-	-		individual	Alphabetic	Individual Name
inf_tele_sys_cd	С	1	N	3	ilidb	unit_phone	Alphanumeric	Information telephone system code
inf_telephone_nr	С	28	-	-		unit_phone	Alphanumeric	Information Phone Number
inf_telnr_pur_cd	С	1	N	3	-	unit_phone	alphanumeric	Information Phone Number purpose code
item	С	60	-	1	outpro c	security	Field Label	only the field labels found on the security form can be saved
loc_nco_ic	С	30	-	-	outpro c	demobloc	Free Form	NCO Location
logname	С	14	-	1	outpro c	security	login	The login name of the user
mask	С	1	-	-	ı	-	Y or N	permission indicator
maxid	I	4	N	-	outpro c	max_id	Number	last row number of table
menu_item	С	70	N	-	outpro c	menu_tbl	Free Form	description of what command does
mil_ad_ent_cy_nm	С	17	-		ilidb	mil_pers	Alphanumeric	Military Active Duty entry city name
mil_ad_ent_st_cd	С	2	-	-	-		Alphabetic	Military Active Duty entry state code
mil_asg_posn_nr	С	4	-	-	-		Alphanumeric	Assigned Position Indicator number
mil_attached_cd	С	1	-		ilidb	mil_pers	Alphanumeric	Attached Indicator Code
mil_delay_sep_cd	С	1	-		ilidb	mil_pers	Alphanumeric	Delay in Separation Code

MNEMONIC	ТҮР	LEN	NUL	IDX	DB	TABLE	RANGE	DESCRIPTION
mil_dy_stat_ab	С	3	-	-	-		Alphanumeric	Military Duty Status abbrevia- tion
mil_ead_dt	С	8	-	-	-		YYYYMMDD	Military Entry Active duty date
mil_educ_lvl_cd	С	1	-	-	1		Alphanumeric	Military Education Level code
mil_ets_dt	С	8	-	-	ilidb	enlisted	YYYYMMDD	Mil. Expiration Term of service code
mil_last_pcs_dt	С	6	-	-			YYMMDD	Date of Last Permanent change of station date
mil_pers_clas_cd	C	1	-		ilidb	mil_pers	Alphanumeric	Military Personnel Class code
mil_photo_sus_dt	С	6	-	-	-		YYMMDD	Date of Last Photograph suspense date
mil_phypr_dylm_c d	С	1	-	-	-		Alphanumeric	Military Physical profile duty limitation code
mil_pulhes	С	6	-		ilidb	mil_pers	Alphanumeric	Military PULHES Code
mil_rec_stat_cd	С	1	-	-	-		Alphanumeric	Record Status Code
mil_sqt_score_qy	С	3	-	-	-		Alphanumeric	Military SQT score quantity
mil_svc_agree_cd	С	1	-	-	-		Alphanumeric	Military Service agreement code
mil_svc_comp_cd	С	1	-	-	ı		Alphanumeric	Military Service completion code
nco_ic	С	27	-	-	outpro c	demobloc	Free Form	NCO In Charge
newaddrlin1	С	60	-	1	outpro c	locator_tbl	Free Form	New Address Line 1
newaddrlin2	С	33	-	-	1	=	Free Form	New Address Line 2
neworg	С	55	-	-	ı	-	Free Form	New Organization
newzipcd	С	9	-	-	ı	-	Text Number	New Zip Code
occ_spc_desig_cd	С	1	N	3	ilidb	cmsnd_occ_spe	Alphanumeric	Occupation Specialty designator code
occ_spc_desig_cd	С	1	N	3	ı	enl_occ_spec	Alphanumeric	Occupation Specialty designator code
occ_spc_desig_cd	С	1	N	3	1	wo_occ_spec	Alphanumeric	Occupation Specialty designator code
off_esa_dt	С	8	-		ilidb	cmsnd_off	YYYYMMDD	Officer Service entry active date
off_esa_dt	С	8	-	-		warr_off	YYYYMMDD	Officer Service entry active date
offaddrlin1	С	60	-	-	outpro c	locator_tbl	Free Form	Office Address Line 1
offaddrlin2	С	33	-	-	-	-	Free Form	Office Address Line 2
offzipcd	С	9			-	-	Text Number	Office Zip Code
oldaddrlin1	С	60	_	_			Free Form	Old Address Line 1
oldaddrlin2	С	33		-	-		Free Form	Old Address Line 2
oldziped	С	9		_	-	=	Text Number	Old Zip Code
orderdat	С	10	-	-	-	=	yyyy/mm/dd	Order Date

MNEMONIC	TYP	LEN	NUL	IDX	DB	TABLE	RANGE	DESCRIPTION
orderno	С	7	-	-	-	-	Alphanumeric	Order Number
org_addr_city_nm	С	17	-		ilidb	unit	Alphabetic	Organization Address city name
org_addr_ctry_cd	С	2	-	-	-		Alphanumeric	Organization Address country code
org_addr_forn_nr	С	9	-	-	ı		Alphanumeric	Organization Address foreign number
org_addr_gtwy_ab	С	3	-	-	ı		Alphanumeric	Org. Address gateway abbreviation
org_addr_loc_tx	С	60	-	-	i		Free form	Organization Address location text
org_addr_loc_tx	С	20	-	-		workentr_gen_i	Free form	Work Center Address location text
org_addr_zip_cd	С	9	-		ilidb	unit	Alphanumeric	Organization Address zip code
org_adr_state_ab	С	2	-	-	-		Alphanumeric	Org. Address state abbreviation
org_id	С	6	-	3	ilidb	individual	Alphanumeric	Organization ID
org_id	С	6	-	3	-	unit	Alphanumeric	Organization ID
org_id	С	6	-	3	-	unit_phone	Alphanumeric	Organization ID
org_tel_type_cd	С	1	N	3	-	-	Alphanumeric	Organization telephone type code
origin	С	12	-		outpro c	ecps_tbl	Alphanumeric	Originator number
owner	С	8	-	-	outpro c	adhoc_tbl	Alphanumeric	database owner
password	С	14	-	-	outpro c	security	Encryption	encrypted password
period	С	2	-	-	outpro c	locator_tbl	6 or 12	Period
pers_si_comp_cd	С	1	-	1	ilidb	individual	Alphanumeric	Personnel Security investigation completion code
pers_si_comp_dt	С	8	-	-	-		YYYYMMDD	Personnel Security investigation completion date
pers_si_init_cd	С	1	-	-	-		Alphanumeric	Personnel Security investigation initiation code
pers_si_init_dt	С	8	-	-	-		YYYYMMDD	Personnel Security investigation initiation date
ph_escort	С	20	-	-	outpro c	demobloc	Free Form	Escort Phone
ph_nco_ic	С	20	-	-	-	-	Free Form	NCO IC Office Phone
poc	С	20	-	-	outpro c	ecps_tbl	Alphanumeric	Point of contact
phone	С	13	-	-	outpro c	ecps_tbl	Alphanumeric	Telephone number
pri_lang_cd	С	2	-		ilidb	individual	Alphanumeric	Primary Language Code
printer_class	С	20	-	-	outpro c	printer	submenu only	printer class option
printer_class	С	20	N	-	i	printer_default	Free Form	printer class option

MNEMONIC	TYP	LEN	NUL	IDX	DB	TABLE	RANGE	DESCRIPTION
printer_name	C	15	N	-	-	-	Alphanumeric	printer name
priority	С	9	N		outpro c	ecps_tbl	Alphanumeric	Priority of the problem
prob_date	С	10	N		outpro c	ecps_tbl	YYYY/MM/DD	problem date
prob_descr	С	960	N		outpro c	ecps_tbl	Alphanumeric	problem description
prob_title	С	66	N		outpro c	ecps_tbl	Alphanumeric	problem title
prog_id	С	66	Y		outpro c	ecps_tbl	Alphanumeric	program identification
prom_indic_cd	C	1	-		ilidb	mil_pers	Alphanumeric	Promotion Indicator Code
prvcyact	С	1	-	-	outpro c	locator_tbl	Y, N, or Priva- cy Act (Initial- ized "N")	Blank
query_id	Ι	4	N	-	outpro c	adhoc_svdet	Number	query number located in adhoc_svqry
query_id	I	4	-	-	1	adhoc_svqry	Number	unique query id number
query_name	С	60	N	-	-	-	Free Form	name of saved query
rank	С	7	-	-	outpro c	locator_tbl	Free Form	Rank
rec_sol	С	480	-		outpro c	ecps_tbl	Free form	Recommended solution
remarks	С	900	-		outpro c	ecps_tbl	Alphanumeric	Remarks Text
rept_type	С	14	-	-	outpro c	ecps_tbl	Alphanumeric	Type of Report
rmks1	С	65	-	-	-	-	Free Form	Remarks Line 1
rmks2	С	65	-	-	-		Free Form	Remarks Line 2
save_date	С	10	-	-	outpro c	adhoc_svqry	YYYY/MM/DD	day when query was made
sec_lang_cd	С	2	-		ilidb	individual	Alphanumeric	Secondary Language Code
sel_type	Ι	4	-	-	outpro c	adhoc_svqry	1, 2 or 3	1= "SELECT ALL", 2= "SELECT UNIQUE", 3= "SELECT COUNT"
send_to	С	28	-		outpro c	ecps_tbl	Alphanumeric	Send to Address
sent_from	С	25	-		outpro c	ecps_tbl	Alphanumeric	Sent to whom
sent_from2	С	25	-		outpro c	ecps_tbl	Alphanumeric	location and/or person
show	С	1	-	-	outpro c	adhoc_tbl	Y or N	show indicator
sort_direct	С	4	-	-	outpro c	adhoc_svdet	ASC or DESC	direction to list sort
ssn	С	9	N	-	outpro c	locator_tbl	Free Form	Social Security Number
status	С	1		-	-	-	P, S or T	Status

MNEMONIC	ТҮР	LEN	NUL	IDX	DB	TABLE	RANGE	DESCRIPTION
stru_command_cd	С	2	-	-	unit		Alphanumeric	Army Major command Code
Submit	С	1	N		outpro c	ecps_tbl	Y or N, cannot be blank	Submitted for remedy
table_name	С	18	-	1	outpro c	adhoc_tbl	Alphanumeric	legal table name
tabname	С	18	N	-		max_id	Alphanumeric	legal table name
title	С	20	-	-	outpro c	ecps_tbl	Alphanumeric	Title
un_descr_dsg_id	С	2	-		ilidb	individual	Alphanumeric	Unit descriptive Designator ID
un_descr_dsg_id	2	N	3	-		unit	Alphanumeric	Unit descriptive Designator ID
un_descr_dsg_id	С	2	N	3	-	unit_phone	Alphanumeric	Unit descriptive Designator ID
un_office_sym	C	16	-		ilidb	unit	Alphanumeric	Unit Office Symbol
un_porg_dsg_id	С	3	-		ilidb	individual	Alphanumeric	Unit Parent Organization designator id
un_porg_dsg_id	С	3	N	3	-	unit	Alphanumeric	Unit Parent Organization designator id
un_porg_dsg_id	С	3	N	3	-	unit_phone	Alphanumeric	Unit Parent Organization designator id
un_svc_dsg_cd	С	1	-		ilidb	individual	Alphanumeric	Unit Service Designator code
un_svc_dsg_cd	С	1	N	3	-	unit	Alphanumeric	Unit Service Designator code
un_svc_dsg_cd	C	1	N	3	-	unit_phone	Alphanumeric	Unit Service Designator code
unit	С	30	N	-	outpro c	demobloc	Free Form	Unit Name
unit_name	С	30	-		ilidb	unit	Alphanumeric	Unit Name
user_id	С	8	N		outpro c	ecps_tbl	Alphanumeric, cannot be blank	User Identification
user_id	С	8	-	1	outpro c	adhoc_svqry	Free Form	user login
user_id	I	4	N	-	-		Security	number field 3 of /etc/passwd
username	С	14	N	-	outpro c	printer_default	Login name	valid user name
value	С	32	-	-	outpro c	adhoc_svdet	Free Form	value used to compare in where clause
wo_asi_cd	С	2	-		ilidb	wo_occ_spec	Alphanumeric	Warrant Officer ASI code
wo_mgmt_br_cd	С	2	-		ilidb	warr_off	Alphanumeric	Warrant Officer management branch code
wo_mos_id	C	4	-	-		wo_occ_spec	Alphanumeric	Warrant Officer MOS ID
wo_sqi_cd	C	1		-		wo_occ_spec	Alphanumeric	Warrant Officer SQI code